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CITY AND COUNTY OF BRISTOL



THE
HEALTH OF BRISTOL
IN
1956

R. C. WOFINDEN
M.D., B.S., D.P.H., D.P.A.
Medical Officer of Health

THE HEALTH OF BRISTOL IN 1956

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ANNUAL REPORT 1956

MY LORD MAYOR, LADIES AND GENTLEMEN,

I have the honour to present my first annual report on the health of Bristol for the year 1956.

On 31st January Dr. R. H. Parry relinquished his post as Medical Officer of Health and I succeeded him on the 1st February. Continuity in the administration of the health services was ensured as I had served as his deputy for the previous eight years—a period of apprenticeship which I thoroughly enjoyed and I regarded it as a special privilege to work under such an able and distinguished public health doctor.

Dr. Robert Hughes Parry was appointed Medical Officer of Health in 1930 and during his period of office there were great and continuing improvements in the health of the people of Bristol. A large share of the credit for this improvement must go to him and the health committees which he had the honour to serve for over a quarter of a century. He took up his duties at a time when the infant death rate was nearly 60 per 1,000 births—three times higher than when he left, when maternal mortality was four times higher than it is at present and when between 1,000 and 1,500 cases of diphtheria a year were commonplace. During his period of office the maternal and child welfare and school medical services were closely integrated, municipal hospitals for the acute and chronic sick were developed and a close and continuing relationship with the University of Bristol was achieved. His standing as a public health doctor was high, not only in this country but also internationally and his contributions to public health progress in both spheres were outstanding.

This report follows the pattern of previous years and deals with the health of the City and the activities of the Health Department during the year 1956, and Heads of the various sections of the Department have contributed individual reports on their work.

My comments are confined to certain highlights of the work, new ventures, progress with existing schemes, and the foreshadowing of possible future developments.

Vital Statistics The principal vital statistics for the City indicate that the health of the people has been maintained at a high level and compares very favourably with the record of any of the other 20 large towns of England and Wales. There was a slight increase in the adjusted birth rate which in 1956 was 14.99 compared with 14.61 in 1955; the adjusted death rate has fallen from 11.30 in 1955 to 10.78 in 1956. The infant mortality rate has been maintained at 19 but the neo-natal death rate at 14.54 and the stillbirth rate at 24.86 have shown a slight increase from last year when rates of 12.71 and 20.25 respectively were recorded. The increase in the stillbirth rate was most noticeable in the first six months of the year and close inquiry has provided no explanation but it may be nothing more than a chance fluctuation. Seventy-five per cent. of the infant deaths occurred in the neo-natal period compared with 66 per cent. in 1955. There were only two maternal deaths neither of which was considered to have been preventable.

Prevalence of Infectious and Notifiable Disease During the year 3,818 cases of infectious diseases were notified to the Department, the lowest figure for the past 7 years. This was largely due to the absence of a measles epidemic together with the lowest recorded rate for scarlet fever over the past 30 years, the lowest number of poliomyelitis cases for ten years and the second lowest number of cases of whooping cough for the past nine years. For the seventh successive year there was no recorded case of diphtheria and for the tenth successive year no recorded death from this disease. Combined diphtheria-pertussis vaccines have been made available to general practitioners and used in the City's Local Health Authority clinics for the past four years and there is some evidence that the age of onset of whooping cough is being deferred to the higher age groups. As mortality in whooping cough tends to be higher in early life this is a welcome trend. During the year it was decided to make available to general practitioners a triple vaccine against whooping cough, diphtheria and tetanus. There was strong support for this from both general practitioners and hospital specialists. The ultimate hope is that it will not be necessary to give so many individuals tetanus antitoxin (with all its attendant disadvantages) when they have suffered injury. There remains, of course, the difficulty of relying on the hearsay evidence of the child or the parent that active immunisation against tetanus has already been carried out. To try to meet this difficulty personal record cards are now being issued by both the Local Health Authority doctors and general practitioners to the parents of all children inoculated.

The year was notable for the introduction by the Ministry of Health of the first vaccine against poliomyelitis. The parents of children born between 1947 and 1954 were invited to register for vaccination with the Local Health Authority and 19,831 such children were registered. Only a short immunisation season was permitted for vaccination purposes and 1,784 completed their course during this time.

The number of notifications of dysentery—763—was the highest for seven years. Most of the cases occurred in the first five months of the year and were of the mild Sonne type. School children were mainly affected. It has long been the practice in this City to rely on clinical as opposed to bacteriological evidence as to when the child should be allowed to return to school, for full bacteriological control is quite impracticable and leads to much lost school time.

The incidence and the death rate from pulmonary tuberculosis continued to decline and new record low rates of 0·69 per 1,000 and 0·084 per 1,000 respectively were achieved. The hospital authorities have found it possible to close many T.B. beds and there is now no waiting list for hospital admission.

Capital Developments Three new clinics were opened during the year—the Charlotte Keel, replacing the temporary accommodation in Claremont Street, the "John Milton" serving Henbury new estate and the "Mary Hennessy" serving the Hartcliffe new estate. It is fitting that these clinics should be named after distinguished members of the Council who have done so much in the interests of the health and welfare of their fellow citizens. Each of these clinics will serve a population of roughly 10,000 and with the exception of the Charlotte Keel Clinic, they are of the same design as the post-war clinics at Brooklea and Lawrence Weston.

Thanks to the far-sighted policy of the Committee, Bristol is gradually becoming well served with clinics; indeed, seven new ones have been opened in the post-war period and there are now thirteen strategically sited buildings providing health services readily accessible to the people. The decision to extend facilities at the clinics to any interested general medical practitioner to help him perform his ante-natal and post-natal work has helped considerably to streamline the City's maternal services. This scheme is particularly valuable to the mother who receives all her ante- and post-natal care at one centre where all those interested in her welfare—general practitioner, consultant obstetrician, midwife, health visitor and dentist—are gathered together under one roof. Such an arrangement not only ensures a high standard of work but is a common sense use of buildings which might not be otherwise fully used. The scheme is a tribute to the co-operation of the professional members of the three branches of the National Health Service.

It is a matter for regret that other capital projects which the Committee had in mind have had to be deferred because of financial stringency. They include: further new clinics at St. George and on the Withywood estate; a central ambulance station so badly needed to replace the present outworn and inefficient depots; a new occupation centre for mental defectives to relieve the gross overcrowding at Marlborough House; a hostel for mental defectives to give freedom to certain defectives who ought not to be in hospital; and badly needed provision of administrative headquarters for the Health Department at Castle Street.

For the past two years negotiations have been pursued with the Regional Hospital Board to provide x-ray and clinical pathology facilities at the William Budd Health Centre. The Health Committee are anxious that such aids to diagnosis should be readily available not only to the people attending the Centre, but also to general medical practitioners working in the area. Their provision would mean a small new extension to the building. Disappointingly, the hospital authorities were not prepared to co-operate, believing that such services and facilities should be hospital centred. Many reports have been issued on the desirability of improving the standard of general practice in this country and one can only deplore this missed opportunity for a further experiment at the new Health Centre.

Health Education One of the "growing points" of the Department's work is in the sphere of health education. During the year, Miss Finch was appointed as technical assistant to Mr. Mackintosh, the Health Education Officer. Their main duties are to co-ordinate, on behalf of the Medical Officer of Health, all the health education activities of the Department. During last century—the so-called "sanitary era"—the people could reap the benefits of an improved environment which did not call for any personal effort on their part. Today the position is very different for it is becoming increasingly apparent that unless we can get people to help themselves many of our medical activities are so much wasted effort. There is no doubt about the public demand for knowledge about health and sickness matters. One of our main activities must be to satisfy that demand, to create a well-informed public who, in the long run, must be our strongest allies in improving their own health. To this end it is necessary to disseminate more health information about the health and health services of Bristol. This has been achieved by preparing each month an information Bulletin which has been circulated to all doctors

in the City, to Health Committee members and to the local press. The latter have co-operated splendidly by extracting and publicising much of this information. There is also a need, however, to stimulate a more active interest of the public in health matters and one of the ways in which we are hoping to achieve this is by encouraging people to participate more directly in health education activities. For example, a Home Safety Council has now been set up under the auspices of the Health Committee and it is proving its value in giving a far wider dissemination of information than the Health Department could have achieved alone. A similar venture is being undertaken in regard to tuberculosis ascertainment by enlisting the active co-operation of volunteers from the Community Association of one of the housing estates in order to press forward with a mass radiography campaign.

Further Developments in Mental Health Nineteen fifty-six was the centenary year of the Society of Medical Officers of Health. The public health doctors of last century were in the forefront of the battle to produce a clean healthy environment in which to live. Their success was marked by the eradication or considerable reduction of epidemic disease. In the first fifty years of this century efficient personal health services for vulnerable groups—expectant and nursing mothers, infants, school children, mental defectives and patients suffering from tuberculosis or venereal diseases—have been built up. These developments coupled with advances in the therapeutic field have done much to reduce the great volume of physical ill-health and disease within the community. However, there is now being uncovered a tremendous volume of mental ill-health in the form of emotional maladjustment which makes itself apparent in many different ways—absenteeism from work, juvenile delinquency, broken marriages, problem families, to mention but a few. To try to prevent some of these troubles is, perhaps, one of the big challenges of our times. There can be little doubt that the seeds of much emotional maladjustment are laid in early life and wise guidance of parents of babies and young children appears to be called for. The key worker in this regard is undoubtedly the health visitor but she must be properly trained and have sufficient time on each case if she is to be really effective. Some two or three years ago two part-time psychiatric social workers were attached to some of the maternal and child health clinics in order to help the health visitors and mothers with some of the emotional problems of early childhood. Much of the time of the psychiatric social workers has been spent in holding case conferences with the health visitors and public health doctor based on the clinic. This approach has helped considerably to re-orientate the outlook of the health visitor and give her more insight into the problems of emotional maladjustment. The success of this experimental venture has led to a much fuller scheme, now approved by the Health Committee, whereby four additional psychiatric social workers and two part-time psychiatrists will be recruited in order to extend this work. In addition, plans were made during the year for the Health Committee to give “house room” in five of the clinics to Regional Hospital Board psychiatrists who wish to conduct consultant neurosis clinics for general practitioner patients. In due course it is hoped to decentralise much of the mental health service, basing it on these five main clinics where the psychiatrists, mental welfare officers, psychiatric social workers and health visitors can all work as a team under one roof.

Children Neglected in their Own Homes During the year under review six area case committees were set up in different parts of the City. Their work is to co-ordinate efforts on behalf of incipient problem families, to reduce multiplicity of visiting and to try to give help before the family situation has deteriorated too seriously to achieve effective rehabilitation. There is close collaboration between the area case committees and the central case committee of officers.

In addition, the Health Committee approved a scheme whereby an additional medical officer and three additional special health visitors would be recruited to work with the known problem families within the City.

Recruitment of Public Health Staff There has been considerable disquiet in the public health service in regard to the recruitment of trained staff. In particular, shortages of trained health visitors, public health inspectors and dentists prevented desirable expansion in the work of these officers. While Bristol has not been so badly off as some areas there are vacancies in all these departments. There is, of course, a national shortage of these skilled workers and without our local training schemes for health visitors and public health inspectors the City would be even worse off because local training schools are our main field for recruitment. In spite of Working Party Reports on sanitary inspectors, and health visitors, little has been done, nationally, to improve the situation. This is rather deplorable, particularly in these days when many voices are being raised at the high cost of hospital treatment, and the difficulties of getting a hospital bed. The country faces an overall shortage of eligible woman power for nursing services. One strong incentive to health visitor recruitment would undoubtedly be higher salaries for as the years go by the health visitor's salary, in spite of her long training and high qualifications, compares increasingly unfavourably with those of hospital sisters, children's officers, and social welfare workers. The health visitor is the acknowledged spearhead of the attack in the preventive field and this "laissez-faire" policy in regard to recruitment may be regretted in the years to come.

Some progress has been made in the recruitment of public health inspectors, partly by securing some slight increase in their salaries but also by introducing a training course leading to the Meat and Other Foods Certificate of the Royal Society of Health. This improvement is particularly welcome at a time when the Department has been given many additional responsibilities under new legislation.

Recruitment of dental officers is still difficult in spite of some balancing up of salary levels as between private practitioners and Local Authority dentists. Our establishment is one Senior Dental Officer together with 13 full time dentists to cover the preventive dental work for some 33,000 pre-school and 68,000 school children and approximately 6,500 expectant mothers a year. Having regard to the Ministry of Education recommendation that there should be one dentist for every 3,000 school children it will readily be seen how far short our service is of the ideal.

Environmental Health The Chief Public Health Inspector gives an interesting account of the many aspects of environmental health covered in his section. The Food Hygiene Regulations, the Clean Air Act and the Slum Clearance programme all of which have been initiated this year,

will add increasingly to the work of the Department. They are all very welcome measures which will help to speed up the provision of a clean and healthy environment in which to live.

Administrative Developments This year the opportunity arose of re-considering the whole of the lay administrative arrangements within the Department. Modifications in the administrative framework were introduced which it is hoped will help not only to attract recruits but also to hold out better promise of promotion within the Department. Two new technical posts were created—an assistant health education officer and an assistant statistician. These posts reflect the growing importance of these two aspects of public health work.

Extension of Services within the Home The provision of home nurses, midwives, health visitors and home helps constitutes the local health authority's main contribution to the care of the patient in the home. The present-day small family coupled with increasing mobility of the population, an increased proportion of old people in the population and an overall shortage of accommodation in old peoples' homes and hospitals all lead to an increased need for domestic assistance in the home. It is pleasing to record that the Health Committee are fully aware of this need and during the year agreed to a further expansion of the home help service from the equivalent of 180 full-time workers to the equivalent of 210 full-time workers. Experience has shown the advantage (even though it makes the service more difficult to administer) of employing a large number of part-time and only a few full-time workers for this allows for flexibility, makes recruitment easier and cuts down travelling time. The Committee also embarked upon another useful extension of the home care services by inaugurating a Night Watcher Service designed primarily to give relatives a rest from their labour in long term sickness cases.

It is a pleasure to record my thanks to the enthusiastic support I have received from members of the Health Committee and Council during my first year of office. I am grateful too, for the help and co-operation received from the Town Clerk and other chief officers and to all the members of my own staff who have given me the same enthusiastic and loyal service as they gave to my predecessor.

I have the honour to remain,

Your obedient servant,

R. C. WOFINDEN, M.D., D.P.H., D.P.A.

Medical Officer of Health.

2. SUMMARY OF VITAL STATISTICS

Population

The Registrar General has estimated the home population (including H.M. Forces stationed in the area) at mid-year 1956 to be 440,500, a decrease of 2,000 from that for the previous year. The rates for 1956 are based upon this estimated figure.

The figures given in the following tables for births, stillbirths, and deaths (but not marriages) are those allocated by the Registrar General to Bristol as registered during the respective years and corrected for inward and outward transfers according to residence.

	1955	1956
Estimated home population (mid-year)	442,500	440,500
Marriages	3,535	3,581
Rate (persons married) per 1,000 population ..	15.98	16.26
Births registered during year	6,531	6,669
Rate per 1,000 population	14.76	15.14
Rate per 1,000 population adjusted (ACF. 1956 0.99)	14.61	14.99
Stillbirths registered during year	135	170
Rate per 1,000 total births	20.25	24.86
Deaths registered during year	5,208	5,395
Crude rate per 1,000 population	11.77	12.25
Adjusted rate per 1,000 population (ACF. 1956 0.88)	11.30	10.78
Natural increase (per 1,000 population)	2.99	2.89
Deaths under one year registered during year ..	125	129
Rate per 1,000 live births registered during year	19.14	19.34
Deaths under four weeks registered during year ..	83	97
Rate per 1,000 live births registered during year	12.71	14.54
Deaths from puerperal causes registered during year	2	2
Rate per 1,000 total births registered during year	0.30	0.29

Marriages

	Number of marriages during year	Rate persons married per 1,000 popn.
1956	3,581	16.26
1955	3,535	15.98
1954	3,377	15.18
1953	3,460	15.58
1952	3,585	16.15
1951	3,506	15.88
1950	3,512	15.87
1949	3,783	17.20
1948	3,786	17.41
1947	4,033	18.82

Births

	YEAR						
	1950	1951	1952	1953	1954	1955	1956
Total live births registered in Bristol (not corrected for residence)	7,833	7,536	7,635	7,719	7,588	7,469	7,714
Non-citizen registered births in Bristol (included in above)	956	897	988	1,025	1,168	1,215	1,354
Births registered in Bristol—citizens only ..	6,877	6,639	6,647	6,694	6,420	6,254	6,360
Births to Bristol citizens—registered outside the City	219	233	113	251	271	277	309
R.G.'s corrected figure—Registered live births (Bristol citizens)	7,096	6,872	6,760	6,945	6,691	6,531	6,669
Birth rate per 1,000 total population ..	16.03	15.56	15.23	15.63	15.04	14.76	15.14

Illegitimacy (Rate: 44 per 1,000 live births registered during year)

	1955	1956
Total illegitimate live births registered in Bristol (not corrected for residence)	376	388
Non-citizen illegitimate births registered in Bristol (included in above)	106	123
Non-citizen percentage of total illegitimate live births registered in Bristol	28.2%	31.7%
Registrar General's total. Illegitimate registered live births (corrected for residence)	285	293
As percentage of R.G.'s corrected Bristol live births registered during the year	4.4%	4.4%

Stillbirths Total No. (corrected by R.G. for residence) registered during 1956—170 (1955—135). Rate: 24.9 per 1,000 total births registered.

This increase over the previous year (20.3 for 1955) was most noticeable in the first six months of the year.

Deaths Rate: (Crude) 12.25 per 1,000 population.

(Adjusted) 10.78 per 1,000 population (Area Comparability Factor 0.88).

During 1956 the total number of deaths actually *occurring* in Bristol within the year was 5,958, of which 765 were non-citizens. The number of inward transfers in respect of citizens who died outside the City area was 201.

The Registrar General's corrected figure for deaths of Bristol residents *registered* during 1956 is 5,395 and the crude death rate is 12.25 per 1,000 population. Comparable figures of Registrar General for 1955—5,208 deaths and the rate 11.77.

Natural Increase Rate: 2.89 per 1,000 population.

	1955	1956
Bristol births registered during year	6,531	6,669
Bristol deaths registered during year	5,208	5,395
Natural increase	+1,323	+1,274

Infant Mortality (Total deaths of Bristol citizens under 1 year of age registered in 1956—129).

(Rate: 19 per 1,000 live births registered in 1956).

	1955	1956
Total deaths under one year of age registered in Bristol	187	198
Non-citizens included in above	67	71
Total infant deaths allocated to Bristol (R.G.'s corrected figure)	125	129
Rate per 1,000 registered live births	19.14	19.34

The infant mortality rate for 1956 is very similar to that of 1955, the lowest ever recorded in the City.

	1956	1955	1954	1953	1952	1951	1950	1949
Legitimate infant mortality rate per 1,000 legitimate live births registered in the year ..	20	19	21	22	21	20	23	25
Illegitimate infant mortality rate per 1,000 illegitimate live births registered in the year ..	14	25	22	13	33	25	29	34

Neo-natal Deaths (i.e., deaths under four weeks of age). Registered during 1956: 97. Rate: 14.54 per 1,000 live births registered in 1956.

During 1956 the deaths of 154 babies during the first four weeks of life were registered in Bristol; 58 were non-citizens. Comparable figures for the year 1955 are 130 including 48 non-citizens. After correction by the Registrar General in respect of residence, the 1956 registered figure becomes 97 compared with 83 in 1955. The deaths in this age group, after correction, represent 75 per cent. of the total infants dying under one year of age (66 per cent. in 1955). Of the total neo-natal deaths in 1956 (uncorrected for transfers) 64 (42 per cent. approx.) occurred on the first day of life and 67 (44 per cent. approx.) during the remainder of the first week. In 1955 comparable figures are respectively 45 and 39 per cent.

In 1956, after correction for transfers, 36 deaths occurred on the first day and 45 in the remainder of the first week.

For 1956, of the corrected total of 97 neo-natal deaths, only 2 were of illegitimate babies. This gives a legitimate neo-natal mortality rate of 14.9 per 1,000 legitimate live births registered in 1956 and an illegitimate neo-natal mortality rate of 6.8 per 1,000 illegitimate live births registered in 1956.

Maternal Mortality (Number of deaths—2). Rate: 0.29 per 1,000 total births (live and still) registered during the year.

There were five maternal deaths registered in the City during 1956. Of these two were of Bristol residents (listed below), the same as in the previous year but the 1956 rate (0.29) improves upon the low rate record (0.30) established in 1955.

1956—Causes

Pulmonary embolism	1
Ruptured ectopic pregnancy	1

VITAL STATISTICS

TABLE I. Supplied by the Registrar General

Population, marriages, births, deaths, natural increase, infant mortality—for Calendar Year 1956 and previous six years—
(Registrations during year)

	1956	1955	1954	1953	1952	1951	1950
Estimated population (mid-year) * { Home Constructed	440,500 —	442,500 —	444,900 —	444,200 —	443,900 —	†442,700 441,650	442,600 —
Marriages Number	3,581	3,535	3,377	3,460	3,585	3,506	3,512
Rate persons married per 1,000 pop. * { Home Constructed	16·26 —	15·98 —	15·18 —	15·58 —	16·15 —	15·84 15·88	15·87 —
Birth registrations:							
Legitimate—males	3,271	3,216	3,298	3,365	3,249	3,335	3,506
females	3,105	3,030	3,075	3,271	3,209	3,255	3,280
Illegitimate—males	150	152	158	141	156	144	143
females	143	133	160	168	146	138	167
Total	6,669	6,531	6,691	6,945	6,760	6,872	7,096
Rate per 1,000 population	15·14	14·76	15·04	15·63	15·23	15·52	16·03
Rate per 1,000 pop. (constructed)* ..	—	—	—	—	—	15·56	—
Stillbirth registrations:							
Legitimate—males	85	66	72	64	77	72	80
females	72	57	81	55	61	70	62
Illegitimate—males	4	6	2	4	4	8	6
females	9	6	5	3	2	5	10
Total	170	135	160	126	144	155	158
Rate per 1,000 total births	25	20	23	18	21	22	22
Death registrations:							
Males	2,727	2,647	2,583	2,591	2,504	2,783	2,543
Females	2,668	2,561	2,582	2,555	2,467	2,840	2,539
Total	5,395	5,208	5,165	5,146	4,971	5,623	5,082
Rate per 1,000 population	12·25	11·77	11·61	11·58	11·20	12·70	11·48
Rate per 1,000 pop. (constructed)* ..	—	—	—	—	—	12·73	—
Natural increase per 1,000 population ..	2·89	2·99	3·43	4·05	4·03	2·82	4·55
" " (constructed)*	—	—	—	—	—	2·83	—
Deaths under one year (registered):							
Legitimate	125	118	132	148	135	133	156
Rate per 1,000 legitimate live births ..	20	19	21	22	21	20	23
Illegitimate	4	7	7	4	10	7	9
Rate per 1,000 illegitimate live births ..	14	25	22	13	33	25	29
Total deaths	129	125	139	153	145	140	165
Rate per 1,000 live births	19	19	21	22	21	20	23
Deaths under four weeks:							
Total deaths	97	83	106	105	102	92	112
Rate per 1,000 live births	15	13	16	15	15	13	16
Diarrhoea and enteritis (under two years):							
Deaths	2	3	1	3	2	4	2
Rate per 1,000 live births	0·30	0·46	0·15	0·43	0·30	0·58	0·28
Maternal mortality:							
Deaths from:—							
Sepsis of pregnancy, childbirth and the puerperium	1	1	1	1	—	—	1
Abortion with toxæmia	—	—	1	1	—	—	—
Other toxæmias of pregnancy and the puerperium	—	—	1	—	4	1	3
Haemorrhage of pregnancy and childbirth	—	—	—	1	—	1	—
Abortion without mention of sepsis or toxæmia	—	—	—	—	1	—	1
Abortion with sepsis	—	—	—	2	1	1	—
Other complications of pregnancy, childbirth and the puerperium	1	1	1	2	1	4	2
Total deaths	2	2	4	7	7	7	7
Rate per 1,000 total births	0·292	0·300	0·584	0·989	1·01	0·996	0·96

* The Registrar General's constructed population for use in the computation of rates for the year which combine "before boundary change" and "after boundary change" figures.

† Relates to the area as constituted at midyear (subsequent to boundary changes).

TABLE 2. Supplied by the Registrar General

Birth-rates, death-rates, analysis of mortality, maternal mortality
and case-rates for certain infectious diseases in the year 1956

(Provisional figures based on quarterly returns)

										Bristol	England and Wales
										Rates per 1,000 Home population	
Birth Registrations:											
Live	..	..	..	..	..	..	..	..	..	15.1	15.6
Still	..	..	..	..	..	..	..	..	..	24.9 (a)	23.0 (a)
Death Registrations:											
ALL CAUSES (Crude)										12.2	11.7
(Adjusted)										10.8	—
Typhoid and paratyphoid fevers										—	0.00
Whooping cough										—	0.00
Diphtheria										—	0.00
Tuberculosis										0.10	0.12
Influenza										0.14	0.06
Smallpox										—	—
Acute poliomyelitis (including polioencephalitis)										—	0.00
Pneumonia										0.66	0.52
Notifications (corrected):											
Typhoid fever										—	0.00
Paratyphoid										0.00	0.01
Meningococcal infection										0.03	0.03
Scarlet fever										0.74	0.74
Whooping cough										1.58	2.07
Diphtheria										—	0.00
Erysipelas										0.17	0.10
Smallpox										—	—
Measles										0.79	3.59
Pneumonia										1.35	0.57
Acute poliomyelitis (including polioencephalitis)—											
Paralytic										0.01	0.04
Non-paralytic										0.01	0.03
Food poisoning										0.48	0.25
Puerperal pyrexia										29.83 (a)	16.26 (a)
										Rates per 1,000 live births	
Deaths under one year of age										19.34	23.8 (b)
Deaths from diarrhoea and enteritis (under 2 years of age)										0.30	0.50
Maternal Mortality:				Rate per 1,000 total births (i.e., live and still)				Rate per million women aged 15 to 44 (England and Wales)			
				Deaths No. | Rate Bristol		Deaths No. | Rate Eng. & Wales					
Maternal causes—excluding abortion				2	0.29	330	0.46	36			
Due to abortion				—	—	71	0.10	8			
Total maternal mortality				2	0.29	401	0.56	44			

(a)—per 1,000 TOTAL births (live and still).

(b)—per 1,000 related live births.

TABLE 3. Compiled from figures supplied by the Registrar General

Total deaths by cause and age registered during Calendar Year 1956

DISEASE					Sex	All ages	0-	1-	5-	15-	45-	65-	75 & over
All Causes					M	2,727	84	16	18	126	765	760	958
					F	2,668	45	10	7	99	442	663	1,402
1.	T.B. Respiratory	M	23	—	—	—	4	13	6	—			
		F	14	—	—	8	2	3	—				
2.	T.B. Other	M	5	—	1	1	1	—	1				
		F	1	—	—	—	—	1	—				
3.	Syphilitic Disease	M	9	—	—	—	1	5	3				
		F	5	—	—	—	1	—	3				
4.	Diphtheria	M	—	—	—	—	—	—	—				
		F	—	—	—	—	—	—	—				
5.	Whooping Cough	M	—	—	—	—	—	—	—				
		F	—	—	—	—	—	—	—				
6.	Meningococcal Infection	M	—	—	—	—	—	—	—				
		F	—	—	—	—	—	—	—				
7.	Acute Poliomyelitis	M	1	1	—	—	—	—	—				
		F	—	—	—	—	—	—	—				
8.	Measles	M	—	—	—	—	—	—	—				
		F	—	—	—	—	—	—	—				
9.	Other Infective and Parasitic Diseases..	M	7	—	1	1	3	1	—				
		F	2	—	—	1	—	1	—				
10.	Malignant Neoplasm of Stomach ..	M	91	—	—	2	36	32	21				
		F	51	—	—	2	11	14	24				
11.	" " " Lung, Bronchus	M	152	—	—	6	84	46	16				
		F	23	—	—	2	9	7	5				
12.	" " " Breast	M	—	—	—	—	—	—	—				
		F	97	—	—	9	47	25	16				
13.	" " " Uterus	M	34	—	—	3	14	12	5				
		F	256	—	1	19	82	75	79				
14.	" " " Other & Lymph. Neoplasms..	M	207	—	1	2	12	69	50				
		F	11	—	1	5	4	1	—				
15.	Leukaemia, Aleukaemia	M	8	—	1	1	1	2	2				
		F	14	—	—	—	5	6	3				
16.	Diabetes	M	19	—	—	1	3	8	7				
		F	285	—	1	4	58	85	137				
17.	Vascular Lesions of Nervous System ..	M	473	—	—	6	68	126	273				
		F	448	—	—	10	173	148	117				
18.	Coronary Disease, Angina	M	292	—	—	2	46	98	146				
		F	75	—	—	2	18	26	29				
19.	Hypertension with Heart Disease ..	M	101	—	—	1	19	32	49				
		F	386	—	2	6	54	85	239				
20.	Other Heart Disease	M	511	—	—	12	35	92	372				
		F	158	—	1	—	19	42	96				
21.	Other Circulatory Disease	M	220	—	—	4	11	42	163				
		F	31	—	—	5	9	9	8				
22.	Influenza	M	30	—	2	1	2	4	21				
		F	150	10	3	4	31	46	56				
23.	Pneumonia (including Pneu. of Newborn)	M	142	9	2	2	15	31	83				
		F	180	—	—	3	60	64	53				
24.	Bronchitis	M	96	—	—	—	11	23	62				
		F	50	1	1	1	2	19	16				
25.	Other Diseases of Respiratory System ..	M	21	—	—	3	3	6	9				
		F	38	—	—	1	15	11	11				
26.	Ulcer of Stomach and Duodenum ..	M	21	—	—	1	4	6	10				
		F	9	—	1	—	1	5	2				
27.	Gastritis, Enteritis and Diarrhoea ..	M	14	1	—	—	3	4	6				
		F	29	—	—	5	15	5	4				
28.	Nephritis and Nephrosis	M	24	—	—	2	8	7	7				
		F	31	—	—	—	3	8	20				
29.	Hyperplasia of Prostate	M	2	—	—	2	—	—	—				
		F	36	22	3	3	3	1	1				
30.	Pregnancy, Childbirth, Abortion	M	17	9	2	—	2	3	1				
		F	150	51	1	1	10	28	26				
31.	Congenital Malformations	M	177	23	2	4	13	39	53				
		F	33	—	5	2	13	6	3				
32.	Other Defined and Ill-Defined Diseases..	M	12	—	—	—	3	3	4				
		F	36	—	—	2	8	9	6				
33.	Motor Vehicle Accidents	M	35	2	—	—	1	6	7				
		F	32	—	—	—	11	10	4				
34.	All other Accidents	M	18	—	—	—	4	10	3				
		F	2	—	1	—	—	1	—				
35.	Suicide	M	—	—	—	—	—	—	—				
		F	—	—	—	—	—	—	—				
36.	Homicide and Operations of War ..	M	—	—	—	—	—	—	—				
		F	—	—	—	—	—	—	—				

TABLE 4. Compiled from figures supplied by Registrar General
Causes of death registered during Calendar Year 1956

Death Rate per 1,000 Population	Disease	No. Deaths 1956	Per cent. of all Deaths
·084	1. T.B. Respiratory	37	·70
·014	2. T.B. Other	6	·11
·032	3. Syphilitic disease	14	·26
—	4. Diphtheria	—	—
—	5. Whooping Cough	—	—
·002	6. Meningococcal infection	1	·02
—	7. Acute poliomyelitis	—	—
—	8. Measles	—	—
·020	9. Other infective and parasitic disease	9	·17
·322	10. Malignant neoplasm of stomach	142	2·63
·397	11. „ „ „ lung, bronchus	175	3·24
·220	12. „ „ „ breast	97	1·80
·077	13. „ „ „ uterus	34	·63
1·051	14. „ „ other and lymph. neoplasms	463	8·58
·043	15. Leukaemia, aleukaemia	19	·35
·975	16. Diabetes	33	·61
1·721	17. Vascular lesions of nervous system	758	14·05
1·680	18. Coronary disease, angina	740	13·72
·400	19. Hypertension with heart disease	176	3·26
2·036	20. Other heart disease	897	16·63
·858	21. „ „ circulatory disease	378	7·01
·139	22. Influenza	61	1·13
·663	23. Pneumonia (including pneumonia of new-born)	292	5·41
·627	24. Bronchitis	276	5·12
·161	25. Other diseases of respiratory system	71	1·32
·134	26. Ulcer of stomach and duodenum	59	1·09
·052	27. Gastritis, enteritis and diarrhoea	23	·43
·120	28. Nephritis and nephrosis	53	·98
·070	29. Hyperplasia of prostate	31	·57
·005	30. Pregnancy, childbirth, abortion	2	·04
·120	31. Congenital malformations	53	·98
·742	32. Other defined and ill-defined diseases	327	6·06
·102	33. Motor vehicle accidents	45	·83
·161	34. All other accidents	71	1·32
·114	35. Suicide	50	·93
·005	36. Homicide and operations of war	2	·04
12·247	All Causes	5,395	

TABLE 5. Deaths (corrected for transfers) occurring within the years 1955 and 1956 (Local figures)

Inter- national Code No.		1955		1956	
		TOTAL	Including	TOTAL	Including
001-008	T.B. of respiratory system	51		39	
010-019	T.B. other	7		5	
020-029	Syphilis and its sequelae	6		9	
030-039	Gonococcal infection and other V.D.	—		—	
040-049	Infectious disease in intestinal tract	1		—	
050-064	Other bacterial diseases	3		4	
070-074	Spirochaetal diseases (except syphilis)	—		1	
080-096	Disease attributed to viruses	4		6	
100-108	Typhus and other rickettsial diseases	—		—	
110-117	Malaria	—		—	
120-138	Other infective and parasitic diseases	—		—	
140-148	Malignant neoplasm of buccal cavity and pharynx	17		16	
150-159	Malignant neoplasm digestive organs and peritoneum	367		352	
151	Malignant neoplasm stomach		146		143
153	Malignant neoplasm large intestine (except rectum)		91		82
154	Malignant neoplasm rectum		49		53
160-165	Malignant neoplasm respiratory system	174		192	
170-181	Malignant neoplasm breast & genito-urinary system	229		258	
170	Malignant neoplasm breast		88		96
171/4	Malignant neoplasm uterus		32		34
175	Malignant neoplasm ovary, fallopian tube and broad ligament		25		36
177	Malignant neoplasm prostate		34		37
180/1	Malignant neoplasm kidney, bladder and other urinary organs		43		45
190-199	Malignant neoplasm other and unspecified sites ..	52		71	
200-205	Neoplasms of lymphatic & haematopoietic tissues	41		37	
210-229	Benign neoplasm	5		8	
230-239	Neoplasm of unspecified nature	9		9	
240-245	Allergic disorders	24		24	
250-254	Diseases of thyroid gland	5		3	
260	Diabetes mellitus	26		32	
270-277	Diseases of other endocrine glands	3		2	
280-289	Avitaminoses, and other metabolic diseases ..	4		5	
290-299	Diseases of blood-forming organs	17		14	
300-309	Psychoses	2		—	
310-318	Psychoneurotic disorders	1		—	
320-326	Disorders of character, behaviour and intelligence	2		2	
330-334	Vascular lesions affecting central nervous system ..	680		696	
331	Cerebral haemorrhage		245		264
332	Cerebral embolism and thrombosis		373		379
340-345	Inflammatory diseases of central nervous system ..	17		8	
350-357	Other diseases of central nervous system	81		66	
360-369	Diseases of nerves and peripheral ganglia	—		—	
370-379	Inflammatory diseases of eye	—		—	
380-389	Other diseases and conditions of eye	—		—	
390-398	Diseases of ear and mastoid process	3		—	
400-402	Rheumatic fever	—		3	
410-416	Chronic rheumatic heart disease	106		101	
420-422	Arteriosclerotic and degenerative heart disease ..	1437		1483	
420	Arteriosclerotic heart disease, including coronary disease		733		743
422	Other myocardial degeneration		680		712
430-434	Other diseases of the heart	76		74	
440-447	Hypertensive disease	258		243	
440/3	Hypertensive heart disease		198		206
450-456	Disease of arteries	310		293	
460-468	Diseases of veins and other diseases of circulatory system	31		28	

TABLE 5—continued

Inter- national Code No.		1955		1956	
		TOTAL	Including	TOTAL	Including
470-475	Acute upper respiratory infections	4		2	
480-483	Influenza	27		57	
490-493	Pneumonia (4 weeks plus)	243		287	
500-502	Bronchitis	249		279	
510-527	Other diseases of respiratory system	71		75	
530-539	Diseases of buccal cavity and oesophagus ..	2		3	
540-545	Diseases of stomach and duodenum	53		58	
550-553	Appendicitis	5		5	
560-561	Hernia of abdominal cavity	21		21	
570-578	Other diseases of intestines and peritoneum ..	34		42	
580-587	Diseases of liver, gallbladder and pancreas ..	28		40	
590-594	Nephritis and nephrosis	32		48	
600-609	Other diseases of urinary system	36		35	
610-617	Diseases of male genital organs	36		28	
620-626	Diseases of breast, ovary, fallopian tube and para- metrium	—		—	
630-637	Diseases of uterus and other female genital organs	—		1	
640-649	Complications of pregnancy	1		1	
650-652	Abortion	—		—	
660	Delivery without complication	—		—	
670-678	Delivery with specified complication	1		—	
680-689	Complications of the puerperium	1		1	
690-698	Infections of skin and subcutaneous tissue ..	—		2	
700-716	Other diseases of skin and subcutaneous tissue ..	3		2	
720-727	Arthritis and rheumatism, except rheumatic fever ..	9		11	
730-738	Osteomyelitis and other diseases of bone and joint	6		4	
740-749	Other diseases of musculoskeletal system ..	2		3	
750-759	Congenital malformations	52		50	
760-769	Birth injuries, asphyxia and infections of newborn	50		60	
763	Pneumonia of the newborn		3		—
770-776	Other diseases peculiar to early infancy	6		11	
780-789	Symptoms referable to systems or organs	3		5	
790-795	Senility and ill-defined diseases	20		14	
E800-802	Railway accidents	1		1	
E810-825	Motor vehicle traffic accidents	33		43	
E830-835	Motor vehicle non-traffic accidents	—		—	
E840-845	Other road vehicle accidents	2		1	
E850-858	Water transport accidents	4		1	
E860-866	Aircraft accidents	—		—	
E870-888	Accidental poisoning by solid and liquid substances	2		2	
E890-895	Accidental poisoning by gases and vapours	15		20	
E900-904	Accidental falls	38		32	
E910-936	Other accidents	17		15	
E940-946	Complications due to nontherapeutic medical and surgical procedures	2		—	
E950-959	Therapeutic misadventure and late complications of therapeutic procedures	—		1	
E960-965	Late effects of injury and poisoning	1		—	
E970-979	Suicide and self-inflicted injury	44		46	
E980-985	Homicide and injury purposely inflicted by other persons	—		2	
E990-999	Injury resulting from operations of war	1		1	
	TOTALS	5204		5394	

TABLE 7. Notifiable cases during 1956 (including Port Cases) Local figures.

Notifiable Diseases	Notifications							Removed to hospital		Notified in each quarter				Attack rate per 1,000 population	Deaths (corrected for transfers) not necessarily relevant to notifications of 1956						
	At all ages	At ages—years :																			
		Under 1	1 to 4	5 to 14	15 to 24	25 to 44	45 to 64	65 and upwards	No.	%	1st	2nd	3rd		4th	All ages	Under 1	1 to 4	5 to 14	15 to 44	45 to 64	65 and upwards
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas	73	1	2	7	15	31	17	25	34	22	17	12	22	0.166	—	—	—	—	—	—	—
Scarlet fever	324	2	100	212	8	2	—	132	41	120	82	48	74	0.736	—	—	—	—	—	—	—
Paratyphoid	2	—	1	—	1	—	—	2	100	—	2	—	—	0.005	—	—	—	—	—	—	—
Typhoid	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Meningococcal infection	11	4	4	1	—	2	—	11	100	7	—	2	2	0.025	1	—	—	—	—	—	—
Poliomyelitis (including polioencephalitis)	10	—	3	3	3	1	—	9	90	4	1	3	2	0.023	—	—	—	—	—	—	—
Pneumonia (excluding pneumonia of new born)	596	30	63	69	26	83	142	260	44	295	114	61	126	1.353	287	14	2	3	6	45	217
Malaria	3	—	—	—	3	—	—	1	33	—	2	1	—	0.007	—	—	—	—	—	—	—
Dysentery	763	22	240	298	49	115	26	47	6	540	158	42	23	1.732	—	—	—	—	—	—	—
Acute infectious encephalitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal pyrexia*	255	—	—	—	—	—	—	—	—	76	55	60	64	—	—	—	—	—	—	—	—
(corrected)	204	—	—	129	126	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ophthalmia neonatorum	27	27	—	—	—	—	—	—	—	11	11	3	2	—	—	—	—	—	—	—	—
Measles	349	17	182	143	2	4	1	18	5	21	165	147	16	0.792	—	—	—	—	—	—	—
Whooping cough	695	80	332	279	2	1	1	54	8	181	162	224	128	1.578	—	—	—	—	—	—	—
Acute rheumatism (to 15 years)	28	—	—	26	2	—	—	22	79	10	11	4	3	—	3	—	—	—	—	—	—
Food poisoning	210	6	12	35	117	25	13	11	5	21	136	26	27	0.477	—	—	—	—	—	—	—

* 10 cases occurred at home of which 2 were subsequently removed to hospital. No deaths were directly attributed to puerperal pyrexia.

TABLE 6 showing Population, Birth-Rates, Death-Rates, Zymotic Death-Rates, Infant and Maternal Mortality Rates of the 20 large towns of England and Wales for 1956

	Birmingham	Bradford	Bristol	Cardiff	Coventry	Croydon	Kingston-upon-Hull	Leeds	Leicester	Liverpool	Manchester	Newcastle-upon-Tyne	Nottingham	Plymouth	Portsmouth	Salford	Sheffield	Southampton	Stoke-on-Trent	Sunderland
R.G.'s estimated population	1,110,800	286,400	440,500	249,800	272,600	249,300	300,200	508,600	284,000	773,700	686,200	277,100	312,500	216,200	231,100	167,400	499,000	196,400	273,000	182,800
Comparability factor—																				
(a) births	0.94	1.00	0.99	0.94	0.95	0.99	0.96	0.98	0.99	0.93	0.96	0.96	0.95	1.02	1.05	0.96	1.01	0.98	0.94	0.94
(b) deaths	1.08	0.95	0.88	1.12	1.37	0.83	1.24	1.15	1.06	1.23	1.18	1.14	1.13	1.09	0.95	1.23	1.13	1.11	1.31	1.25
Crude birth rate per 1,000 population	16.63	16.8	15.14	17.88	17.02	14.5	18.58	15.8	15.4	20.60	17.44	17.73	16.50	16.31	15.08	16.88	14.11	16.92	15.6	20.48
Birth rate as adjusted by factor	15.63	16.8	14.99	16.81	16.1	14.4	17.84	15.5	15.2	19.16	16.74	17.02	15.67	16.64	15.83	16.20	14.25	16.58	14.7	19.25
Crude death rate per 1,000 population	10.88	14.1	12.25	11.24	8.3	11.7	10.7	11.3	11.3	11.43	12.35	11.83	11.15	11.28	12.22	12.30	11.73	10.51	11.1	10.2
Death rate as adjusted by factor	11.75	13.4	10.78	12.59	11.3	9.9	13.3	13.0	12.0	14.05	14.57	13.49	12.60	12.29	11.61	15.13	13.25	11.67	14.5	12.74
Infantile mortality rate per 1,000 live births	24.6	28.2	19.34	27.76	26.7	19.0	28.86	26.9	19.7	25.91	29.92	24.628	21.92	17.58	24.10	29.37	23.6	30.08	27.0	25.38
Neonatal mortality rate per 1,000 live births	17.6	19.3	14.54	19.03	21.1	10.0	19.18	19.0	13.7	17.36	20.14	17.708	15.11	13.05	16.35	20.17	18.0	20.76	18.13	16.83
Stillbirth rate per 1,000 total births	22.95	25.08	24.86	25.7	19.46	20.0	24.48	21.6	23.3	24.11	26.36	28.86	23.67	23.80	24.89	28.20	21.95	26.93	30.58	24.24
Perinatal mortality rate per 1,000 total births	37.44	41.7	36.70	41.00	36.1	28.0	36.2	37.5	36.2	38.68	43.77	43.882	35.61	35.44	37.48	45.05	37.2	42.74	46.32	38.0
Maternal mortality rate per 1,000 total births	0.63	0.41	0.29	0.66	0.42	—	0.71	0.61	0.45	0.43	0.24	1.186	0.76	0.27	0.28	1.03	—	0.59	0.228	0.52
Tuberculosis rates per 1,000 population—																				
(a) Primary notifications																				
Respiratory	0.93	0.85	0.690	1.18	1.5	0.746	0.89	0.81	0.78	1.313	0.86	1.231	1.04	1.05	0.65	0.681	0.801	1.07	0.978	1.28
Non-respiratory	0.10	0.07	0.109	0.12	0.17	0.092	0.09	0.11	0.092	0.130	0.08	0.245	0.11	0.08	0.06	0.06	0.074	0.05	0.11	0.15
(b) Deaths—																				
Respiratory	0.14	0.09	0.084	0.14	0.14	0.100	0.15	0.11	0.095	0.177	0.15	0.148	0.11	0.12	0.11	0.197	0.184	0.127	0.216	0.14
Non-respiratory	0.01	0.01	0.014	0.004	0.018	0.004	0.013	0.02	0.011	0.009	0.02	0.011	0.01	0.00	0.004	0.006	0.020	0.015	0.011	0.01
*DEATH RATES PER 1,000 POPULATION FROM:—																				
Cancer (all forms including leukaemia and aleukaemia)	2.08	2.33	2.11	2.08	1.7	2.375	2.04	1.94	2.02	2.054	2.23	2.132	2.01	1.83	2.09	2.449	2.188	2.20	2.989	2.05
Cancer—Lungs and Bronchus	0.45	0.46	0.40	0.396	0.351	0.521	0.48	0.44	0.363	0.579	0.59	0.458	0.42	0.33	0.42	0.621	0.535	0.51	0.491	0.43
Meningococcal Infections ..	0.00	0.007	0.00	0.012	0.00	0.00	0.006	0.00	—	0.005	0.01	0.0036	0.00	0.00	—	—	0.008	0.02	0.003(6)	—
• Whooping Cough	0.01	0.00	—	—	0.00	—	0.003	0.00	—	0.006	—	0.0036	—	—	—	0.006	—	—	—	—
Influenza	0.03	0.04	0.14	0.04	0.01	0.04	0.035	0.05	0.056	0.022	0.05	0.0288	0.05	0.05	0.01	0.048	0.040	0.04	0.022	0.03
Measles	0.00	0.00	—	—	0.00	—	—	—	—	—	—	—	0.00	—	—	—	—	—	—	—
Acute Poliomyelitis and Encephalitis	0.01	0.00	—	0.012	0.00	0.00	0.003	—	—	0.001	0.01	—	—	—	—	0.12	0.002	—	—	—
Diarrhoea (under 2 years) ..	0.02	0.024	0.00	0.004	0.02	0.00	0.01	0.02	0.007	0.006	0.01	—	0.01	0.00	0.03	—	0.008	0.01	0.007(3)	—
Diarrhoea (under 2 years) per 1,000 live births	0.97	1.45	0.30	0.22	1.72	1.38	0.57	1.37	0.46	0.314	0.50	—	0.58	0.28	2.01	—	0.57	0.30	0.047	—

* Where no deaths have occurred at all, a "dash" is inserted.
Where the number of deaths is too small to express as a rate, the figures 0.00 are inserted.

TABLE 8. Tuberculosis Notifications in Bristol

CASES													
	Sex	At All Ages	Under one	1-	5-	10-	15-	20-	25-	35-	45-	55-	65 and over
1956—													
Pulmonary Tuberculosis													
New notifications	M	191	—	4	10	3	15	21	29	21	39	32	17
	F	113	—	4	4	5	16	20	25	19	12	5	3
Transfers from other areas ..	M	67	—	—	1	—	2	16	30	9	3	6	—
	F	37	—	—	1	1	6	9	11	7	2	—	—
Deaths mentioning Tuberculosis, not notified	M	7	—	—	—	—	—	—	—	—	1	1	5
	F	4	—	—	—	—	—	—	1	—	—	—	3
1956—													
Non-Pulmonary Tuberculosis													
New notifications	M	28	—	2	2	4	1	4	4	3	2	5	1
	F	20	—	—	1	2	1	—	6	3	3	2	2
Transfers from other areas ..	M	2	—	—	—	—	—	2	—	—	—	—	—
	F	3	—	—	1	—	—	—	2	—	—	—	—
Deaths mentioning Tuberculosis, not notified	M	2	—	—	—	—	—	—	—	1	—	1	—
	F	1	—	—	—	—	—	—	—	—	1	—	—
New Notifications—													
Pulmonary—													
1955 ..	M	201	2	3	9	6	14	15	36	35	27	36	18
	F	147	—	3	3	3	26	24	47	21	8	5	7
1954 ..	M	218	2	4	11	4	24	21	42	25	46	24	15
	F	168	—	2	9	11	34	27	45	24	8	2	6
1953 ..	M	239	—	10	14	4	21	26	43	29	46	30	16
	F	185	—	7	6	11	20	38	42	29	17	7	8
1952 ..	M	266	—	8	11	6	23	35	49	39	39	37	19
	F	214	—	6	5	16	41	36	61	29	8	7	5
1951 ..	M	296	1	11	10	9	28	43	50	45	58	29	12
	F	208	—	9	10	9	31	51	47	18	15	10	8
1950 ..	M	223	2	11	10	7	27	16	44	36	34	30	6
	F	205	—	9	12	9	40	48	43	19	12	11	2
1949 ..	M	279	1	6	11	2	34	36	60	47	48	22	12
	F	199	—	3	5	11	36	42	52	21	8	14	7
1948 ..	M	267	—	11	14	12	24	38	42	43	39	31	13
	F	211	—	9	14	11	50	39	40	17	20	7	4
Non-Pulmonary—													
1955 ..	M	19	—	—	2	—	1	3	5	3	2	2	1
	F	27	—	3	4	—	7	5	3	2	1	1	1
1954 ..	M	19	—	2	4	1	2	2	4	—	1	—	3
	F	30	—	2	—	2	5	6	11	—	—	1	3
1953 ..	M	16	1	5	—	—	3	2	2	1	1	—	1
	F	22	—	2	1	—	6	5	3	4	—	—	1
1952 ..	M	24	—	2	5	3	3	2	2	3	2	2	—
	F	30	—	6	3	—	1	3	6	7	3	—	1
1951 ..	M	26	1	4	2	1	3	2	3	3	2	4	1
	F	25	2	1	3	4	3	4	6	—	—	—	2
1950 ..	M	29	2	3	7	3	2	2	4	4	2	—	—
	F	22	—	6	1	2	2	2	3	5	—	1	—
1949 ..	M	37	2	6	5	6	4	2	2	3	2	4	1
	F	34	1	2	6	2	6	3	6	5	3	—	—
1948 ..	M	35	—	3	12	3	8	—	3	1	3	2	—
	F	41	—	6	4	1	1	6	10	5	3	2	3

TABLE 9. Tuberculosis in Bristol—Deaths
(Registrar General's corrected figures)

PULMONARY TUBERCULOSIS—								
Year	Sex	At All Ages	Under One	1—	5—	15—	45—	65 and Over
1956	M	23	—	—	—	4	13	6
	F	14	—	—	—	8	2	4
1955	M	38	—	—	—	11	19	8
	F	14	—	—	—	8	2	4
1954	M	41	—	—	—	12	23	6
	F	26	—	—	—	13	9	4
1953	M	61	—	—	—	24	28	9
	F	32	—	—	—	16	9	7
1952	M	62	1	—	—	20	31	10
	F	29	—	—	—	13	10	6
1951	M	83	—	—	1	27	43	12
	F	67	—	—	1	39	20	7
1950	M	89	—	1	—	28	47	13
	F	93	—	2	—	55	28	8
1949	M	108	—	1	—	43	52	12
	F	86	1	2	1	59	17	6
1948	M	136	—	1	—	55	61	19
	F	72	—	—	1	52	13	6
NON-PULMONARY TUBERCULOSIS—								
1956	M	5	—	1	1	1	1	1
	F	1	—	—	—	—	—	1
1955	M	3	—	—	—	1	2	—
	F	4	—	—	1	1	—	2
1954	M	3	—	1	1	—	1	—
	F	4	—	1	—	3	—	—
1953	M	6	—	3	—	2	—	1
	F	6	—	1	1	1	2	1
1952	M	5	—	—	1	2	1	1
	F	6	—	1	—	2	1	2
1951	M	10	1	2	1	3	3	—
	F	4	—	1	—	2	1	—
1950	M	14	1	2	1	2	7	1
	F	5	—	1	1	1	1	1
1949	M	15	—	2	4	3	5	1
	F	8	—	1	3	2	1	1
1948	M	17	1	5	2	8	1	—
	F	13	2	3	1	4	1	2

TABLE 10. Infant Mortality (Corrected for transfers)**Deaths occurring in 1956 (Local figures)**

1955	Cause of Death	Total 1956	First day	From one day under one week	From one week to four weeks	Total under four weeks	Total from one month to under twelve months
—	T.B. respiratory	—	—	—	—	—	—
—	Meningococcal meningitis ..	1	—	—	—	—	1
2	Non-meningococcal meningitis ..	1	—	—	—	—	1
—	Acute poliomyelitis	—	—	—	—	—	—
1	Whooping cough	—	—	—	—	—	—
1	Measles	—	—	—	—	—	—
20	Pneumonia (four weeks plus) ..	13	—	—	—	—	13
3	Pneumonia of the newborn ..	7	—	2	5	7	—
—	Influenza	—	—	—	—	—	—
—	Bronchitis	1	—	1	—	1	—
—	Gastro-enteritis (four weeks plus)	1	—	—	—	—	1
36	*Congenital malformations ..	32	2	12	10	24	8
18	*Birth injury	13	5	7	1	13	—
28	*Atelectasis	37	21	16	—	37	—
1	*Haemolytic disease of newborn ..	—	—	—	—	—	—
1	*Haemorrhagic disease of newborn	1	—	1	—	1	—
1	Other diseases of early infancy ..	—	—	—	—	—	—
4	*Immaturity (unqualified)	10	6	3	—	9	1
9	Other causes	12	2	3	—	5	7
125	TOTALS	129	36	45	16	97	32
	Rate per 1,000 live births registered in 1956	19.34	5.40	6.75	2.40	14.54	4.80
	Year 1955 { TOTALS	125	39	29	15	83	42
	Rate per 1,000 live births registered ..	19.14	5.97	4.44	2.30	12.71	6.43

* Where there has been mention of immaturity—{ 1956—Bristol cases—52
During 1955—Bristol cases—37

Infant Deaths in:—	Hospitals	109 (including 2 in hospitals outside City area)
	Nursing Homes ..	—
	Private Residences ..	20
	Total	129

3. PREVALENCE & CONTROL OF INFECTIOUS DISEASES

Dr. H. Temple Phillips

(Chief Assistant Medical Officer of Health)

Diphtheria

No confirmed cases occurred during 1956. This was the seventh consecutive year with no confirmed cases in the City, and the tenth consecutive year when no deaths were attributed to the disease. Graphs illustrating the fall in diphtheria and its relationship to immunisation were included in the report for 1954. Immunisation must be maintained at a high level in order to prevent the disease. The numbers of children immunised in 1956 are recorded in Section B of this report.

Dysentery

Notified cases in 1956 totalled 763 as compared with 335 in 1955. For the eighth year in succession no deaths were attributed to the disease.

Seven hundred and nineteen cases were of the Sonne type. In the remaining cases the causative agent was not identified.

The numbers of cases notified each month were:—

January	53	July	22
February	218	August	7
March	269	September	13
April	99	October	17
May	42	November	2
June	17	December	4

The incidence had risen in October 1955 to 23 cases, in November to 61 and December to 83, so that the disease was again largely a winter disease.

The age and sex distribution of cases showed that the highest incidence was in children under 10 years of age.

Age	Male	Female	Total
0—	146	115	261
5—	136	113	249
10—	21	30	51
15—	7	15	22
20—	24	44	68
30—	24	37	61
40—	12	12	24
50—	10	17	27
All ages ..	380	383	763

The disease is difficult to control because during an epidemic there are many undiagnosed cases and symptomless excretors. In one day nursery there were 63 cases in February, March and April and much work was done by bacteriologists and public health inspectors in the investigation of their families.

It has become clear that Sonne dysentery is spread mainly by personal contact. Personal and environmental hygiene are therefore the main preventive measures. Special attention to them in the early stages of an outbreak is the most hopeful means of controlling this highly infectious disease.

Enteric Fever (Paratyphoid and Typhoid)

Two cases of paratyphoid fever were notified, one in April and one in May. Both were paratyphoid B. One was in a 1 year old boy and the other in a man of 36. In neither instance did it prove possible to trace the source of infection.

Erysipelas

Seventy-three cases were notified compared with 64 in 1955 which was the lowest incidence recorded in Bristol. No deaths have been attributed to the disease since 1948.

Food Poisoning

The number of cases notified was 210. There were no deaths.

One outbreak in a residential school in May accounted for 122 cases. It was due to Cl. Welchii, Type 10, which was isolated from the stools of six patients. The infection was probably conveyed by meat. No meat was available for investigation, but slow cooking, followed by slow cooling overnight and slow heating just before it was eaten, had provided conditions under which Cl. Welchii could have grown. This type of food poisoning can be avoided if small joints (under 6 lb.) are rapidly cooked and are eaten while freshly cooked and hot. If this is impossible, rapid cooling and rapid heating before serving are advisable.

The remaining 88 cases were spread evenly over the year and were mainly single cases. Nine were due to a toxin, 38 to salmonellae, and in 43 the causative agent was not isolated.

The salmonellae concerned were—

<i>S. typhimurium</i>	..	..	26
<i>S. brandenberg</i>	..	..	6
<i>S. bredeney</i>	..	..	3
<i>S. anatum</i>	..	..	2
<i>S. abony</i>	..	..	1

Measles

The incidence in 1956 dropped to 349 cases following 9,163 cases in 1955, the highest figure ever recorded in Bristol, and 217 cases in 1954, the lowest figure on record. The disease is showing a marked biennial periodicity. The incidence was high in the second and third quarters. There were no deaths from measles.

Ophthalmia Neonatorum

Twenty-seven cases were notified as compared with 15 in 1955.

Pneumonia

The total number of notifications was 596 (517 acute primary pneumonia and 79 acute influenzal pneumonia). The figure for 1955 was 571 (504 acute primary and 67 acute influenzal).

Poliomyelitis

Ten cases were notified, 6 paralytic and 4 non-paralytic. This followed 158 cases (72 paralytic and 86 non-paralytic) in 1955. There were no deaths from this disease in 1956.

The age and sex distribution of cases was:—

Age	Male	Female	Total
0—4	3	1	4
5—14	2	—	2
15—24	—	3	3
25+	—	1	1
Total	5	5	10

The small number of cases in 1956 is no guarantee of a lower incidence in the future than in the years since 1947. Poliomyelitis virus spreads mainly by personal contact from the throat and from the bowel of cases and of healthy carriers. Quarantine of child contacts and strict personal hygiene prevent some cases, but control is difficult. It is to be hoped that vaccination will prove to be valuable. During 1956 supplies of vaccine were short and 1,784 children received two injections.

Rheumatism (Acute)

Acute rheumatism in persons under 16 years of age has been notifiable since October 1947. There were 28 notifications in 1956 and three deaths were attributed to the disease.

Scarlet Fever

The notified incidence of scarlet fever in 1956 (324 cases) was the lowest for over 30 years. For the fifth year in succession no deaths were attributed to the disease.

Tuberculosis

See report in Section B.

Whooping Cough

The number of cases notified was 695 and there were no deaths. The incidence was lower than in 1955 (992 cases). Information about immunisation against whooping cough appears in Section B.

**Tabulation by Age, Sex and Clinical Classification of Cases
Notified as Acute Rheumatism during the year 1956**

Total—26

Clinical Classification of Class Notified	AGE IN YEARS										All Ages		Total Both Sexes (including * recurrences)
	0—4		5—9		10—14		15 over						
	M	F	M	F	M	F	M	F	M	F			
1. Rheumatic Pains and/or Arthritis without heart disease	—	—	2	2	—	1	—	—	1	2	4	6	
2. Rheumatic Heart Diseases (Active) (a) alone	—	—	—	1 1*	1	—	—	—	—	1	2	3 (including 1 * recurrence)	
(b) with polyarthritis	—	—	—	1	3 1*	—	—	—	—	4	1	5 (including 1 * recurrence)	
(c) with chorea	—	—	—	—	1	—	—	—	—	1	—	1	
3. Rheumatic Heart Disease (Quiescent)	—	—	—	—	—	—	—	—	—	—	—	—	
4. Rheumatic Chorea (alone)	—	—	1	—	—	1 1*	—	—	—	1	2	3 (including 1 * recurrence)	
TOTAL Rheumatic Cases	—	—	3	5	6	3	—	1	—	9	9	18 (including 3 recurrences)	
5. Congenital Heart Disease	—	—	—	—	—	—	—	—	—	—	—	—	
6. Other non-rheumatic heart disease or disorder	—	—	—	—	—	—	—	—	—	—	—	—	
7. Not rheumatic or cardiac disease	—	—	4	1	1	1	1	—	—	6	2	8	
TOTAL Non-Rheumatic Cases	—	—	4	1	1	1	1	—	—	6	2	8	

4. METEOROLOGICAL OBSERVATIONS, 1956

A. G. Harding, F.R.Met.Soc.
(*Frampton Cotterell, Nr. Bristol*)

(*From observations taken daily at 9 a.m.*)

Mean pressure (corrected)	..	..	..	29.918"
Departure from average	..	..	..	—0.035"
Greatest pressure	..	..	..	30.643" on Feb. 4th.
Least pressure	..	..	..	28.794" on Jan. 10th.
Extreme range	..	..	..	1.849"
Total rainfall	..	..	..	21.59"
Departure from average	..	..	..	—9.93"
Number of rainy days	..	..	..	192
Departure from average	..	..	..	+8
Days with 0.04" or more	..	..	..	109
Days with less than 0.04"	..	..	..	83
Days with trace (less than 0.005")	..	..	..	14
Heaviest fall in 24 hours	..	..	..	1.11" on Aug. 25th.
Mean humidity	..	..	..	83.4%
Mean temperature	..	..	..	48.25° Fahrenheit
Departure from average	..	..	..	—1.15°
Maximum temperature in screen	..	..	..	83° on July 27th.
Minimum temperature in screen	..	..	..	6° on Feb. 3rd.
Minimum temperature on grass	..	..	..	2.4° on Feb. 3rd.
Extreme range in screen	..	..	..	77°
Mean of warmest day	..	..	..	68.7° on July 24th.
Mean of coldest day	..	..	..	19.9° on Feb. 1st.
Hours of bright sunshine (estimated)	..	..	..	1,192
Departure from average	..	..	..	—346
Days of bright sunshine	..	..	..	55
Days entirely overcast	..	..	..	102
Days with snow	..	..	..	13
Days with thunder	..	..	..	11
Days with fog	..	..	..	34
Days with frost	..	..	..	77
Days with ground frost	..	..	..	127

Notes

1956 was especially notable for a very cold February, a cold, stormy and wet summer, a dry spring and autumn and a dull December.

The mean temperature for February was only 33.8°. On the first two days the temperature did not rise above 27° and fell to 6° on the night of the 2nd—3rd. Some snow fell almost daily from the 9th to 24th but the rainfall for the month was well below average and this continued during the next three months, one of the longest dry spells on record.

June, July and August were dull and stormy, especially August which was generally the wettest since 1912 and coldest since 1914. The rainfall at this particular station was not as great as at others locally as it escaped most of the severe thunderstorms. In one on August 30th 0.63" fell in a half-hour hailstorm. There were also several severe gales, notably on July 29th.

October and November were exceptionally dry and December was very dull and mild, though with some snow on Christmas Day.

I. MATERNAL AND CHILD WELFARE NURSING AND ALLIED SERVICES

Dr. Sarah Walker

(*Senior Medical Officer, Maternal and Child Welfare*)

(i) MATERNITY SERVICES

At this time there is much discussion on the future of the maternity services in this country, and we await the findings of the Cranbrook Committee which is now taking evidence before reporting to the Minister.

In planning the Bristol service, efforts throughout have been directed towards co-ordination and co-operation between the three sections—hospital, general practitioner and Local Health Authority services, and we consider each has been able to make a valuable contribution to the scheme.

The Local Health Authority provides the domiciliary service of midwives and an ante-natal (and post-natal) clinic service.

Domiciliary Service of Midwives

The staff consists of a supervisor, deputy supervisor (who also acts as tutor to pupil midwives undertaking district training) and 32 midwives (including 2 special midwives for premature babies).

The midwives attended 1,615 confinements in 1956 (i.e. 25 per cent. of total deliveries). Bristol midwives continue supervision of mother and baby for the first 28 days and then “hand over” to the health visitor.

Care of Premature Babies

The special premature baby midwives are responsible for the care of any premature babies born and nursed at home. They also, when required, give follow-on nursing care to babies discharged from the hospital premature baby units. Very close liaison is maintained with Southmead Hospital and the two midwives attend the Premature Baby Follow-up Clinic which is under the direction of Dr. Beryl Corner.

Training

Pupil midwives (an average of 64 each year) taking their Part II training at the Bristol Maternity Hospital, spend three months on the district.

Medical students are also given facilities to attend domiciliary confinements during their obstetric training.

Ante-natal Clinic Service

There are 16 centres in the City at which ante-natal sessions are held.

The clinics are so situated as to be within reasonable distance of the homes of the mothers. Mothers attending include domiciliary and hospital (Southmead and Mortimer House) booked cases. Mothers booked for St. Brenda's and Wendover may attend a clinic if their general practitioner happens to undertake ante-natal work in a Local Health Authority clinic.

Staffing

- (a) Consultant obstetricians from Southmead Hospital and Mortimer House attend at 13 of the centres, to see special cases referred by

(iii) THE HEALTH VISITING SERVICE

Miss L. Bendall, Chief Nursing Officer, reports as follows:—

The most important development in the health visiting field during the past year was the publication in June 1956 of the Working Party Report on the field training and recruitment of health visitors.

The Working Party was appointed for the following reasons:—

- (a) Because of the fall in recruitment to health visiting.
- (b) Because of the variation in the interpretation of the health visitors' duties.
- (c) Because of the introduction of other workers into the Public Health field.

In interpreting the Working Party's recommendations it should be borne in mind that the National Health Service Act 1946, Section 24 states:—

“It shall be the duty of every Local Health Authority to make provision in their area for the visiting of persons in their homes by visitors, to be called “health visitors” for the purpose of giving advice as to the care of young children, persons suffering from illness and expectant or nursing mothers, and as to the measures necessary to prevent the spread of infection”.

It may be interesting to include the main conclusions and recommendations of the Working Party report (a's) together with comments on the arrangements in Bristol (b's).

1. (a) Function of the health visitor—primarily health education and social advice to individuals, but taking into account the family as a unit.
 - (b) In reading the Working Party Report one finds great emphasis throughout on the health visitor's function as a health educator and social adviser: these are of course, the main purposes of home visitation, but it is also true to say that in health clinics, the health visitors' function is health education and social advice, either to individuals or in small groups. Owing to the shortage of health visitors in Bristol, all routine duties in clinics have had to be covered by clinic nurses who are state registered nurses without health visitors qualification.
2. (a) It is suggested that less frequent attention may need to be given to the physical care of mothers and young children but more attention will have to be paid to mental hygiene. While intensive visiting may be necessary to potential problem families, health visitors should keep some contact with all families where there are children.
 - (b) It is suggested that health visitors should pay special attention to problem families but should at the same time keep in touch with all families where there are children. Moreover the National Health Service Act has extended the duties of the health visitors to give health advice to the whole family. However, her handle of admission to the home in the first place is usually the birth of a baby, and with shortage of staff the main part of the health visitors' work is still with mothers and children. It will be

recalled that the Minister of Health issued a memorandum 3 years ago requesting health visitors to pay special attention to problem families. Most areas of the City have a hard core of such cases. This has led to the practice of selective visiting—more frequent visits being paid to families where there is either complete or partial neglect, and also where there is failure to make progress for other reasons. There is a consequential sparsity of visiting to normal healthy families, although the health visitor still tries to retain contact where there are children. They are all carrying far too heavy case loads at present. The employment of 3 additional health visitors on problem family work (assuming they can be recruited) will ease the situation.

3. (a) In the School Health Service there is an important field for the qualified health visitor, but her time is often wasted on duties not demanding her full skill which could equally well be carried out by less qualified staff. Whether at the home or at the school the essential work of health visitors is health education and social advice. It might be helpful to employ the term health visitor only in relation to staff who are carrying out duties requiring the health visiting qualification and reserve the term “school nurse” for staff who carry out duties calling only for the nursing qualification.
- (b) The report emphasises again the essential work of the health visitor/school nurse in the school as being health education and social advice and suggests that state registered nurses could be used for routine duties such as weighing and measuring of children, sight testing and cleanliness inspections. It is true that time is wasted by qualified health visitor/school nurses on these routine duties, and the appointment of state registered nurses would be a great advantage.
4. (a) New possibilities of service. Although health visitors have been primarily concerned with the prevention of ill health among the healthy, they should regard tuberculosis as a field of work calling for the service of a qualified health visitor. They have a part to play also in hospital after care as a whole.
- (b) Tuberculosis work in Bristol is carried out by a separate team of nurses or tuberculosis visitors. There are nine in number and only one of them is a qualified health visitor. The others are all trained nurses with experience in tuberculosis work. A fair amount of their time is spent in the after-care of patients discharged from chest hospitals. Owing to our shortage of district health visitors, however, they are not at the moment contributing to the care of patients discharged from general hospitals. In some areas, such as Cardiff, such schemes are in operation—for example—for the after-care of ulcer, diabetic and asthma cases. Their employment for this purpose helps to make the hospital treatment more effective.
5. (a) The general practitioner is tending to become the clinical leader of the domiciliary team. The health visitor is admirably placed to help him. She could be useful where health education and social advice are desirable.

- (b) Co-operation with general practitioners is advocated. Undoubtedly our health visitors and the general practitioners are working more closely together than in the past. This is due to the fact that general practitioners are taking part in the Local Authority services or using local facilities for their ante-natal work at health clinics or centres. Here they have opportunities of getting to know the health visitors. In some cases also, health visitors contact general practitioners either by telephone or by calling at the surgery. There is not, however, by any means the maximum co-operation one would like. Co-operation, to be effective, is a two-way process and there are bound to be incompatibilities in some instances on both sides. However, the employment of more health visitors would give more time to achieve effective co-operation.
- 6. (a) Health visitors can play an important if unspectacular role in relation to mental health.
 - (b) The field of mental health is one which the health visitor has not yet fully explored and she needs a broader basis of training including more knowledge of the psychological factors in parent and child relationship and child development. Many health visitors, however, by virtue of experience and sound common sense are making a contribution to the field of mental health.
- 7. (a) The health visitor can do much to help the aged whether or not in need of medical care.
 - (b) The Health visitor can do much to help the aged. In Bristol, four health visitors specialise completely in the care of the aged, but district health visitors take over the after-care of such patients once the initial work has been done. In this sphere there is good co-operation between the health visitors and all agencies both statutory and voluntary (and including hospitals and general practitioners) interested in the health and welfare of the aged. It is and will be an increasing aspect of the health visitors' work.
- 8. (a) She should undertake the supervision of mentally defective children as part of her normal home visiting duties.
 - (b) The health visitor in Bristol is only concerned with the care of the mentally defective child under the age of 5 years to whom she pays regular visits and gives advice to the mother. She does not give special advice on their mental care. This work is carried out by officers of the mental health section.
- 9. (a) She should be a general purpose family visitor.
 - (b) The health visitor, as already stated, is more concerned with families where there are children, although in certain cases they are also concerned with families where there are no children. Closer association with general practitioners will inevitably widen her field. It has been said that a new type of general family welfare worker should be trained for this work but the better course would be to augment and improve the health visiting force to carry out family visiting work rather than to create an entirely new force for the purpose.

10. (a) She should retain individual responsibility for her own families, but where possible, work in small teams and have a proper base—possibly at a clinic.
- (b) The health visitors in Bristol do retain responsibility for their own districts; they work in small teams and are based on the district clinics. They have facilities for private consultation, the use of the telephone, and limited clerical help. They are free to organise their day-to-day work and co-operate with other workers.
11. (a) There should be co-operation with home nurses and midwives.
- (b) Co-operation with midwives is more extensive than with home nurses. This is due to some extent to the fact that midwives are part of the Local Authority service, use the clinic facilities, and are in closer physical touch with health visitors, while the home nurses are part of an agency service. Also, the health visitors are more concerned with visiting healthy families while the home nurses' work lies with the sick. However, there is no overlapping of effort between the home nurses and the health visitors.
12. (a) The weight of opinion is in favour of health visitors being full time workers and not carrying out combined duties such as home nursing and/or midwifery in addition to health visiting, except in rural areas.
- (b) In Bristol as in almost all cities, health visitors are full time workers and do not carry out the combined duties of midwife and/or home nurse. The sick must always take priority over the well and in combined work there is always the possibility (unless there is very generous staffing) that the health work will come a long way last.
13. (a) Health visitors must have a close working arrangement and personal contact with almoners and ward sisters in hospitals.
- (b) The health visitors do have a fairly close liaison with almoners and ward sisters, particularly with regard to the discharge of babies and young children from hospitals. Almoners frequently ask for reports on home conditions. A health visitor attends the Bristol Children's Hospital one morning a week at Professor Neale's clinic; she is there as a member of the team and liaison officer for the rest of the health visitors. She has access to the wards and case notes. There is also good liaison with the almoners and hospitals dealing with geriatric cases.
14. (a) Specialisation in health visiting is deprecated and if carried out, staff should if possible retain a small area for general duties.
- (b) There is a limited amount of specialisation carried out in Bristol although in some cases a small district is retained by the health visitor concerned. While we appreciate the dangers of specialisation we have found it useful, for example, in the care of premature babies, infectious diseases, old age, blind welfare, and problem families.

15. (a) Group advisers—some health visitors have exceptional ability, and with further training the Working Party report recommends that they should occupy group adviser posts, intermediate between general duties and administrative staff and also undertake increased responsibilities.
 - (b) This is an entirely new conception although divisional superintendents in county areas and clinic sisters in cities are somewhat comparable. The clinic sisters in Bristol do carry out many of the duties envisaged for a home adviser by the Working Party. They take responsibility for staff attached to their clinics and act as advisers to their junior colleagues. Paragraph 10 of the report emphasises that the “health visitor should retain individual responsibility for her own families”. This does not entirely tie up with the later statement that group adviser posts could be created, such persons taking some responsibility away from the health visitor. This might have the effect of reducing the status of the health visitor and her initiative. On the other hand, as there are so few senior appointments in the health visiting service, it would act as an incentive to good health visitors seeking promotion.
16. (a) The Working Party recommend that health visitors should have a refresher course every five years.
 - (b) Arrangements in Bristol for refresher courses for health visitors have been reasonably satisfactory for the last 3 or 4 years.
17. (a) The Working Party were of the opinion that the remuneration of health visitors should be reviewed and it was suggested that the field health visitors, to whom the students are attached for practical experience of visiting, should have some additional reward.

Recruitment and Training

The Working Party felt that the full development of the Health Visiting Service may take as long as ten years. They were of the opinion that there are two possible potential sources for recruits, the first being state registered nurses and the second school leavers who would be encouraged to make health visiting their career from the day they leave school, and who would, therefore, participate in integrated courses which will be discussed later on.

The Working Party felt that the basic training of all health visitors must still be a nursing qualification, but they believe that Part 1 of the midwifery examination should be replaced by a three months' course in midwifery, based on domiciliary rather than hospital midwifery. In their view also the Public Health Course should be of not less than nine months' and preferably one year's duration. However the Working Party recommend experimentation in training. Financial assistance to health visitor students should take the form of standard allowances.

(iv) HEALTH VISITOR TRAINING

Miss J. Sangster, Sister Tutor, reports as follows:—

The health visitors' training course started on September 12th, 1955 and was completed on 23rd March 1956, the students taking the examination set by the Royal Society of Health in April. There are vacancies for 24 students and the full number were selected but one candidate was unable to start training. The 23 students who completed the course have all qualified and are now working in different parts of the country.

The course can be a heavy financial burden on students, particularly as it comes late in their career when many of them have home or other responsibilities. For this reason most students seek financial assistance from a Local Health Authority and undertake to work for that Authority for a time after training.

All students must be State Registered Nurses and have at least the first part of their midwifery training, but most of them come to the course with considerable experience of sick nursing or of midwifery. They find that the training widens their knowledge considerably, and they learn about preventing disease and promoting positive good health; this is often a completely new outlook. The health visitors' work started mainly with mothers and young children; now it has expanded to include the whole family. The training needs constant readjustment to fit the student for the changing and expanding work, and at present increased emphasis is put on mental health and on health education. The students find the course stimulating and enjoyable, but some of them find it a strain to assimilate so much new knowledge in the short period of 6 months.

Student Nurses

Student nurses in training are now given an introduction to public health. This knowledge of health work outside the hospital helps them to have a better understanding of the home background of some of their patients. The Health Visitor Tutor continues to give lectures at most of the hospitals in the City.

School Girls

Some knowledge of the public health services is sometimes given to girls in their last year at school and the Health Visitor Tutor has taken part in the courses of lectures given at some of the schools.

Nursery Nurses

As in the past, the Assistant Tutor has spent $3\frac{1}{2}$ days each week at the Nursery Nurses Training Centre, Stoke Lodge, where she gives instruction on the health and physical development of the young child. This theoretical instruction is closely linked with the practical training which the students receive in the day nurseries. It is most valuable to visit the nurseries to co-ordinate the work.

Clinic Assistants

The clinic assistants received one lecture each week from the Assistant Tutor. They are given an introductory knowledge of anatomy, physiology, and hygiene, which will help them when they start nurse training. It is also hoped that they will have gained, throughout training a basic knowledge of public health.

(v) HOME NURSING SERVICE

Miss G. M. Grazier, Superintendent, reports as follows:—

The Bristol District Nursing Association acts as the agent of the Local Authority in providing the home nursing service for the City. The staff at the end of December 1956 numbered 101, consisting of:—

Administrators	6
Queen's Nursing Sisters	56
Queen's Male Nurses	4
State Registered Nurses	9
State Enrolled Assistant Nurses ..	12
Part-time staff	6
Student Nurses	8

To provide a more adequate system of relief to cover holiday periods, groups of five nurses with a relief nurse are being formed.

Training

Twenty-two nurses were trained during the year; all were successful in passing the examination for the Queen's Hall.

Observation rounds

Throughout the year student nurses from Southmead Hospital and the Children's Hospital have accompanied members of the staff on a morning round.

Statistics. January—December 1956

Analysis of Cases	Cases	Visits From Jan. 1st
Tuberculosis	211	7,714
Other infectious diseases	63	833
Parasitic diseases including thread worms	8	27
Malignant and lymphatic neoplasms	441	14,654
Asthma	31	594
Diabetes mellitus	399	58,853
Anaemias	310	8,662
Vascular lesions affecting central nervous system ..	596	18,926
Other mental and nervous diseases	141	8,254
Diseases of the eye and ear	162	2,520
Diseases of the heart and arteries	1,502	47,621
Diseases of the veins	203	10,013
Upper respiratory diseases	296	2,162
Other respiratory diseases (excluding tuberculosis) ..	1,208	16,806
Constipation and diseases of digestive system	713	8,500
Diseases of urinary system and male genital organs ..	155	4,789
Diseases of breast and female genital organs	318	3,058
Complications of pregnancy and puerperium	126	1,463
Diseases of skin and subcutaneous tissues	512	7,809
Diseases of bones, joints and muscles	346	15,890
Injuries	266	6,534
Senility	508	17,963
Other defined or ill defined diseases or disability ..	309	6,766
Diseases not specified	596	1,677
Total	9,420	272,088

Included in above figures								Cases	Visits From Jan. 1st
Medical	..	..	..	..	..	..	..	8,040	229,799
Surgical	..	..	..	..	..	..	..	980	32,279

Age Groups		Cases	Visits 1—24	Cases	Visits 25+
0—4	..	196	1,316	4	154
5—14	..	249	1,698	5	145
15—44	..	1,231	9,466	197	13,022
45—64	..	1,790	14,090	606	50,394
65—+	..	3,401	30,114	1,741	151,689
Total	..	6,867	56,684	2,553	215,404

(vi) THE HOME HELP SERVICE

Miss P. Walton, the Home Helps Organiser, reports as follows:—

The Home Help Service has continued to aid the ever-increasing number of aged persons in need of assistance in their own homes.

It is interesting to note the changing trends in the use of the service during the past six years.

Number of cases helped:

						1951	1956
Panel	1.	Confinements	..	..	..	300	106
„	2.	Young children to be cared for	..	..	..	251	153
„	3.	Acute sickness	..	..	..	152	147
„	4.	Aged and infirm and chronic sick	..	..	..	1,083	1,787
„	5.	Tuberculosis	..	..	..	84	65
						1,870	2,258

Hours worked in homes of aged and chronic sick in:—

1951 197,991 hours

1956 347,346 hours

Number of home helps employed at 31st December, 1956:—

Full-time 7

Part-time 399

Total equivalent full-time .. 215

During this time the number of home confinements and emergency illness cases has decreased and now long term cases i.e. old people, chronic sick and families where the mother is incapacitated by chronic disease such as rheumatoid arthritis and heart trouble, form a majority.

Many old people who in 1951 were having three hours' help per week, now need thirteen hours, as their physical condition has deteriorated. This is a growing problem and more home helps will be needed to work the extra hours and cope with the new cases which come in daily. Our oldest patient who died recently was 101 years of age. Home helps need patience, understanding and tact if they are to be successful in their efforts to help the aged. Most of them, in spite of the difficulties, feel that

they are doing a very worthwhile job, in giving not only practical assistance, but in many instances helping to relieve the loneliness which can be such a tragic feature of old age.

It will be noted that there has been a marked decrease in the number of maternity cases assisted. One obstacle to encouragement of domiciliary midwifery may well be the cost of the home help service, which the additional maternity grant in most instances only partly meets.

(vii) NIGHT WATCHERS SERVICE

A scheme for a service of night watchers this year was approved by the Health Committee.

A night watcher is made available either to attend a sick person living alone, or to provide relief for a relative or friend who has been sitting up with an ill patient.

(viii) SUB-FERTILITY CLINIC

Investigation and treatment of sub-fertility is a service which makes an important contribution to family life. Failure to have children can be a matter of deep personal distress to a husband and wife. In past ages, because of lack of understanding of the subject, this could only be accepted as a sad but inevitable destiny. Fortunately, with modern advances in knowledge, help can be given to many couples.

Even in those cases where investigations confirm that husband and wife are unlikely to have children, this knowledge will often help them in deciding upon earlier adoption of a child.

The work of the sub-fertility clinic, which is based at the Central Clinic, continues to increase, and extra sessions have had to be arranged to meet the demand. More general practitioners have become aware of the facilities available and are sending an increasing number of their patients. The Bristol Marriage and Family Guidance Council and the Family Planning Association also refer a number of their clients. The work is undertaken by a team of doctors, a Consultant—Mr. W. G. MacGregor (succeeded by Mr. B. M. Edwards), from Professor Lennon's Department, and two Medical Officers—Dr. Norma Boxall who interviews the wives, and Dr. Irving-Bell the husbands.

Apart from problems of sub-fertility, marital difficulties—some with associated psychological problems—are also dealt with.

As a result of routine investigations, a number of pathological conditions have been diagnosed at an early stage when treatment can be most effective. During the year four cases of pelvic tuberculosis and nine gynaecological conditions requiring hospital treatment were thus discovered.

Statistics

New patients referred in 1956:—

(a) Women	186
(b) Men	151

Investigations undertaken:—

Huhner Tests	92
Endometrial biopsies ..	102
Insufflations	36
Cauterisations	30
Hysterosalpingograms ..	61
Admitted to hospital ..	26

(ix) WELFARE OF UNMARRIED MOTHERS

The problems facing an unmarried mother vary considerably—depending upon such factors as her background, occupation, economic position and attitude of her family. In a number of instances the girl is completely friendless or may come from a broken or unhappy home.

Almost all, however, are in need of kindly understanding, advice and support.

Miss Reed—Welfare Officer for the Maternal and Child Welfare Section remains in close personal touch with all unmarried mothers referred or coming to the Department, so long as a need exists. Help is given in arranging for financial assistance by agreements or affiliation orders and in seeing that payments are maintained. The Health Department's Mother and Baby Home at Snowdon Road provides accommodation for 18 mothers (expectant and post-natal) and 12 babies. After confinement, the mother can return to the Home with her baby, where she can plan for her own future and that of her baby.

Arrangements are sometimes made for a mother and baby to be admitted into Grove House Hostel, where mother can take up outside employment.

In some instances the need of the girl wishing to retain her baby, appears to be best met by suitable lodgings with a kindly landlady, one who might fit the role of "foster grandmother". There is perhaps therefore, a case for financial subsidy of suitable lodgings, similar to the arrangement made with hostels.

Statistics

Number of unmarried mothers dealt with during the year:—

(1)	First illegitimate baby	..	..	..	257
(2)	Second illegitimate baby	..	..	..	68
(3)	Third or more illegitimate baby	..	..	..	37
(In most of these cases the parties were cohabiting)					

Total	..	362
-------	----	-----

Number admitted to Snowdon Road Home	..	34
Number admitted to other Mother and Baby Homes	.. .. .	18
Number admitted to Grove House Hostel	..	7

(x) PREVENTION OF BLINDNESS

Mrs. Lillington, Welfare Officer, reports:—

The cases on the Welfare Officer's register now stand at 483, an increase of 24 this year. These cases are brought to the Welfare Officer's care either by the staff at the Eye Hospital, officers of the National Assistance Board, or health visitors.

The service given is help in obtaining necessary treatment, and encouragement to persevere over long periods, thus preventing deterioration which can occur through neglect to carry out recommended treatment. The introduction to the idea of registration frequently has to be made. There was a total of 138 new registrations this year of blind and partially-sighted persons, including six children.

Arrangements were made for one of the children to be admitted to the Blind School, the others not being eligible, due to age or other disabilities.

There was one registration due to retro-lental fibroplasia this year, and one in which the diagnosis was doubtful.

Domiciliary visits for registration purposes by the ophthalmic surgeon have increased this year.

The Welfare Officer has escorted 163 patients to and from the out-patient Department, to ensure that the maximum benefit is obtained from their treatment. Six patients have had cataract extractions as a result of follow-up visiting.

Student nurses from the Eye Hospital were again taken out visiting by the Welfare Officer.

Blind and Partially Sighted

	Cause of Disability							
	Cataract		Glaucoma		Retro-lental Fibroplasia		Others	
	Blind	P/S	Blind	P/S	Blind	P/S	Blind	P/S
1. No. of cases registered during the year, in respect of which, para. 7 (c) of Form BD8 recommends:—								
(a) No Treatment ..	7	3	3	1	1		48	8
(b) Treatment (medical, surgical or optical)	14	11	12	5			15	8
Total cases registered	21	14	15	6	1		63	16
2. No. of cases of 1 (b) above, which on follow-up action have received treatment ..	6	3	10	4			10	8
3. No. of cases of 1 (b) above, refusing treatment	5	1	1					
4. Records not available	2		1	1			4	
5. Still considering operation	1	6					1	

Patients Refusing Treatment

Seven people refused surgical treatment. Reasons given were: "Too old" (2), "Not well enough" (2) and "Nerves bad" (3).

There were no registrations due to ophthalmia neonatorum this year.

(xi) RECUPERATIVE CONVALESCENCE

The value of a convalescent holiday in restoring health after sickness and in preventing physical and mental breakdown cannot be over estimated. In terms of human happiness, efficiency and even national economy, this is a service which requires the fullest possible implementation.

The present scheme of divided responsibility between Regional Hospital Boards who arrange medical convalescence, and Local Health Authorities who arrange recuperative convalescence, has its critics. As recuperative convalescence is essentially preventive and covers mainly those who have had no contact with the hospitals, the present arrangement appears to be the only logical one.

Provision is made for applicants of any age, but the following are some of the main categories dealt with:—

Mothers

The far reaching effects on the family of physical or mental illness of the mother are all too obvious. In a number of cases we have been able to arrange either for the mother to have a holiday on her own, or where she has been unwilling to part with her children, a family holiday has been arranged.

Young Children

Whenever possible, it is desirable that babies or young children should be accompanied by the mother. There are however, a number of situations when this is quite impossible. For example when long term, i.e. 2—3 months' convalescence may be required, the Children's Department continue to give invaluable help in this connection, usually in one of their two country residential nurseries, Nore House or Timsbury. One advantage of this arrangement is that being within a reasonable distance of Bristol, parents are able to visit regularly.

Working Adults

Working adults who are not covered by industrial or other convalescent schemes.

The Aged

A high and increasing proportion of the applications are in respect of old people, either single or married couples.

A period of convalescence will often prevent further deterioration and enable the old people to carry on for a further period in their own homes. In many instances where an old person is being cared for by a relative the "break" gives to both a much needed respite.

A variety of convalescent homes are used, at both seaside and country. On return from convalescence every patient is visited by a health visitor in order to assess the benefit derived.

Statistics

Mothers accompanied by children ..	25 mothers + 63 children
Unaccompanied children	4
Adults (including 51 over 65 years) ..	71

(xii) SPECIAL FAMILIES

The need for health visitors to give particular attention to problem or special families has always been recognised, and the Ministry of Health Circular 27/54 on "prevention of the break up of families" again emphasised the special role of the health visitor in this connection.

Much of the district health visitors' time, especially in certain areas, is devoted to this work. One special liaison health visitor, carrying a limited case load has been working in the City since 1953.

In view of the heavy demands involved, the Health Committee have decided to recruit a further three special health visitors and to appoint an Assistant Medical Officer for this work, the team to work under the direction of the Senior Medical Officer for Maternal and Child Welfare.

A further development in the service for special families, has been the setting up of Area Case Committees. The Medical Officer of Health sponsored the first pilot Area Case Committee, which was set up in the Speedwell area, in April 1956, under the chairmanship of the Senior Medical Officer for Maternal and Child Welfare. Members of the committee, which met monthly, included field workers of the Education, Children's, Welfare Services, Housing, Health, and Probation Departments; a representative of the National Assistance Board also attended. The procedure for discussion of cases was similar to that adopted by the Chief Officers' Conference. Any member might refer cases for discussion and a co-ordinating officer was designated to take the main responsibility for each family. The meetings of this Area Case Committee proved to be most helpful and constructive, and it was felt to be very valuable to have the first hand opinions of those who knew the families personally, in many instances over a number of years.

In view of the experience gained from this pilot venture, and the increasing difficulty experienced by the Chief Officers' Conference in dealing with the volume of cases at their meetings, it was decided to set up a further five Area Case Committees, to cover the whole City. These Committees, each of which is sponsored by one of the main Departments, i.e. Children's, Education, Health, Housing, and Welfare Services, had all started to operate by the end of 1956. The Chief Officers' Conference continues to meet twice monthly to deal with special cases referred from the Area Case Committees, and to discuss questions of general interest and developments in the service.

Mr. A. Strange, Fieldwork Organiser of the Family Service Unit, reports as follows on the work of the Unit:—

"The Unit is engaged in welfare and rehabilitative work with families in the Southmead and adjoining estates, operating on an agency basis for the Local Health Authority.

The service, which is carried out by a fieldwork organiser and two women workers, provides help and support to families who are in special need. Many of the families are threatened with disintegration from time to time through internal stresses or by pressures and demands from outside.

The help offered covers a wide range of domestic interests:

- i. Factual advice on a variety of matters, e.g. the medical and social services, employment, financial problems, etc.
- ii. Dealing with problems arising from relationships within the home and between the family and the community.
- iii. Practical help in the home directed at stimulating the parents' interest and generally improving morale.
- iv. Material aid in selective cases where such help is considered to be of constructive use.

The worker's approach is intended to be friendly and informal, having as its aim achieving a relationship with the family based on mutual confidence. The unit contact in some instances is extended over a long period, and during 1956 nine families who were referred in 1953—the first year of the Unit's existence—were still being visited.

During the year ended 31st December 1956 the unit was in contact with 49 families, of which 18 cases were closed during the period. Home visits totalled 3,203, whilst official enquiries on behalf of families numbered 1,867.

New referrals during the year came from a variety of sources, including the Local Authority chief officers' meeting on special families, health visitors, probation department, school welfare service, Welfare Services Department; almoners, general practitioners, mental health section; and the Bristol Council of Social Service. In addition a number of individual enquiries were dealt with, three of which were given assistance over a period of several months.

Of the 18 cases closed, 7 were considered as being able to manage without further help, and 8 had reached a reasonably satisfactory stage but would probably need help in the future. Two were referred to other agencies, two moved out of the Bristol area, and in one case the family did not respond to the unit's approach.

The excellent liaison established with other workers in the field has contributed to the success of the work, and this has depended both on individual contact and consultation and on representation of the unit on the official co-ordinating committee.

(xiii) STATISTICS

Table I—Maternal and Child Welfare

		1955	1956
(a)	<i>Notifications:</i>		
	Live Births (including 569 premature births)	7,493	7,703
	Still Births	191	225
	Confinements at Home	1,638	1,632
	Premature Births admitted to Hospital (included above)	14	9
	Confinements at Institutions	5,940	6,198
(b)	(i) <i>Municipal Midwives:—</i>		
	Cases completed as (a) Midwife	1,038	1,108
	(b) Maternity Nurse	550	499
	Nursing Visits	16,221	20,298
	Other Visits	22,810	13,982
	Attendances at Ante-Natal Clinics	2,024	1,822
	(ii) <i>Pupil Midwives:—</i>		
	Cases completed as Midwife	924	1,042
	Nursing Visits	13,864	16,968
	Other Visits	9,002	9,396
	Attendances at Ante-natal Clinics	932	828
	(iii) <i>Medical Students—District Midwifery:—</i>		
	Cases attended	71	50
(c)	<i>Attendances at Clinics:—</i>		
	(i) <i>Municipal Ante-natal (Medical Officers' Sessions)</i>		
	Central	2,041	1,916
	Bedminster	672	628
	Clifton	1,188	1,005
	Knowle	1,225	1,038
	Portway	168	121
	Southmead	1,760	1,601
	Speedwell	816	732
	Brooklea	343	293
	North Bristol	1,646	—
	Charlotte Keel	—	986
	Granby House	1,425	1,042
	Verrier Road	1,401	1,081
	Frenchay	207	114
	Brislington (Water Lane)	541	560
	Mary Hennessy	—	30
	William Budd	648	527
	Lawrence Weston	—	—
	John Milton	—	—
	Dovercourt Road	24	—
		14,105	11,674
	(ii) <i>Municipal Ante-natal (General Practitioners Sessions)</i>		
	Bedminster	363	427
	Knowle	893	1,002
	Portway	1,281	1,067
	Speedwell	2,114	2,435
	Brooklea	448	498
	Charlotte Keel	—	1,732
	Granby House	3,439	3,627
	Verrier Road	—	—
	Brislington (Water Lane)	241	338
	William Budd	1,108	1,039
	Lawrence Weston	1,231	1,599
	Mary Hennessy	—	332
	John Milton	—	69
		11,118	14,165

Maternal and Child Welfare—continued

	1955	1956
(iii) <i>Municipal Ante-natal (Midwives' Sessions):—</i>		
Verrier Road	234	107
Bedminster	444	358
Brooklea	329	333
Brislington (Water Lane)	99	90
Knowle	242	156
North Bristol	651	—
Portway	36	108
Central	63	37
Granby House	416	419
Southmead	267	198
Speedwell	258	306
Clifton	50	48
Frenchay	49	2
Dovercourt Road	28	69
Charlotte Keel	—	583
Mary Hennessy	—	127
John Milton	—	—
William Budd	676	603
Lawrence Weston	21	31
Headley Park	673	685
	4,536	4,260
(iv) <i>Post-natal Clinics:—</i>		
Central	605	663
Bedminster	307	257
Speedwell	446	497
Southmead	789	685
Portway	152	152
Knowle	439	388
Clifton	160	139
Granby House	693	703
Verrier Road	173	150
Frenchay	44	17
William Budd	350	456
Lawrence Weston	132	136
North Bristol (Brooklands)	185	—
Brooklea	141	128
Charlotte Keel	—	287
Mary Hennessy	—	27
John Milton	—	7
	4,616	4,692
(v) <i>Consultative Ante-natal Clinics:—</i>		
Central	1,119	1,099
Bedminster	195	194
Speedwell	330	435
Southmead	3,522	3,496
Portway	230	200
Knowle	289	263
Granby House	756	757
Bristol North	893	—
Verrier Road	623	395
Clifton	321	370
William Budd	667	779
Lawrence Weston	192	216
Charlotte Keel	—	604
Brooklea	—	221
	9,217	9,029

Maternal and Child Welfare—continued

	1955	1956
<i>(vi) Municipal Infant Welfare Centres—Mothers:—</i>		
Central	3,421	3,316
Speedwell	4,872	5,543
Southmead	3,647	3,206
Portway	1,992	1,815
Knowle	4,842	4,199
Granby House	5,465	5,690
Bedminster	3,724	4,182
Barton Hill	1,325	1,190
Headley Park	1,235	1,223
Moorfields	1,819	1,280
Brooklea	2,736	2,544
Clifton	2,740	2,918
North Bristol	4,618	—
Brynland Avenue	5,372	5,045
Avonmouth	1,064	998
Brislington (Water Lane)	2,256	1,835
Charlotte Keel	—	4,513
John Milton	—	2,610
Mary Hennessy	—	565
Frenchay	901	826
Bedminster Down	1,725	1,955
Durdham Down	5,046	4,455
Eastville	2,008	2,343
Hotwells	1,749	1,373
Lockleaze	1,331	1,251
Redcliffe	354	—
Sea Mills	1,276	1,250
Westbury	1,984	1,842
Dovercourt Road	1,329	1,232
Fishponds (Guinea Lane)	1,375	1,467
Verrier Road	2,096	2,036
William Budd	2,034	2,070
Ullswater Road	1,516	1,563
Lawrence Weston	2,116	2,317
Bishopsworth	3,641	4,686
Ashton Vale	1,116	915
Henbury	2,572	—
Sturminster Road	286	431
Blaise	22	914
	85,605	85,598
<i>Children under 1 year:—</i>		
Central	2,827	2,733
Speedwell	3,447	4,212
Southmead	2,748	2,430
Portway	1,503	1,409
Knowle	3,473	3,351
Granby House	4,269	4,573
Bedminster	3,022	3,482
Barton Hill	1,063	984
Headley Park	937	822
Moorfields	1,498	946
Clifton	2,415	2,487
North Bristol	3,587	—
Brynland Avenue	4,286	3,956
Brislington (Water Lane)	962	1,483
Avonmouth	777	677
Brooklea	2,505	2,204
Frenchay	568	539
Bedminster Down	1,353	1,544
Durdham Down	3,937	3,513
Eastville	1,463	1,597
Hotwells	1,447	1,105
Lockleaze	960	964

Maternal and Child Welfare—continued

<i>Municipal Infant Welfare Centres (contd.) Children under 1 year (contd.):—</i>	1955		1956	
Sea Mills	299		851	
Westbury	834		1,243	
Dovercourt Road	1,351		951	
Fishponds (Guinea Lane)	1,659		1,232	
St. George (Verrier Road)	1,240		1,664	
William Budd	1,543		1,627	
Ullswater Road	1,589		1,333	
Lawrence Weston	1,315		1,920	
Bishopsworth	1,722		3,774	
Ashton Vale	2,757		635	
Henbury	874		—	
Sturminster Road	2,062		295	
Blaise	190		639	
Charlotte Keel	—		3,952	
John Milton	—		2,200	
Mary Hennessy	—		447	
	66,482		67,774	
	1-2 yrs.	2-5 yrs.	1-2 yrs.	2-5 yrs.
Central	486	354	473	384
Speedwell	862	536	738	917
Southmead	533	625	538	588
Portway	242	305	215	312
Knowle	791	879	529	594
Granby House	598	907	670	714
Bedminster	454	432	426	557
Barton Hill	192	159	165	171
Headley Park	250	286	227	293
Moorfields	225	210	240	176
Clifton	286	364	391	385
North Bristol	755	446	—	—
Brynland Avenue	612	806	715	918
Brislington (Water Lane)	371	459	335	325
Avonmouth	211	234	283	178
Brooklea	141	285	318	339
Frenchay	176	218	179	159
Bedminster Down	353	321	393	344
Durdham Down	937	1,074	715	1,076
Eastville	328	213	404	261
Hotwells	269	213	211	154
Lockleaze	189	203	116	188
Redcliffe	80	67	—	—
Sea Mills	270	326	322	261
Westbury	346	378	391	373
Dovercourt Road	275	169	178	137
Fishponds (Guinea Lane)	97	128	135	108
St. George (Verrier Road)	320	186	262	154
William Budd	301	338	215	240
Ullswater Road	228	200	179	236
Lawrence Weston	336	462	323	292
Bishopsworth	579	851	643	905
Ashton Vale	210	228	157	220
Henbury	285	500	—	—
Sturminster Road	70	64	75	98
Blaise	6	11	298	174
John Milton	—	—	282	811
Charlotte Keel	—	—	414	321
Mary Hennessy	—	—	75	87
	12,664	13,438	12,130	13,450

Maternal and Child Welfare—continued

						1955	1956
<i>Municipal Infant Welfare Centres (contd.)</i>							
<i>New Patients</i>							
Children under 1 year						5,294	5,498
Children between 1 and 2 years						303	439
Children between 2 and 5 years						378	470
(vii)	<i>Birth Control:—</i>						
	Attendances	..	..	..	..	1,415	1,502
(viii)	<i>Minor Ailments:—</i>						
	Inspection	..	..	..	..	1,230	842
	Treatment	..	..	..	..	2,246	1,418
	New Patients—Inspected	..	..	..	..	691	603
	Treated	..	..	..	..	668	597
(ix)	<i>Relaxation Classes:—</i>						
	Ante- and Post-Natal Exercises	..	..	..	..	5,678	6,327
	New Patients	..	..	..	..	1,113	1,209
(x)	<i>Sub-Fertility Clinic:—</i>						
	Attendances	..	..	..	..	1,132	1,388
	New Patients	..	..	..	..	169	190
	<i>Backward Children:—</i>						
	Attendances	..	..	..	..	101	149
	New Patients	..	..	..	..	16	40
	<i>Special Diagnostic Clinic:—</i>						
	Attendances	..	..	..	..	683	720
	New Patients	..	..	..	..	208	231
(d)	<i>Health Visitors:—</i>						
	<i>Visits:—</i>						
	Ante-natal	..	..	..	..	1,378	1,675
	Primary	..	..	..	..	6,466	6,530
	Under 1 year	..	..	..	..	30,174	30,451
	At least 1 year and under 2	..	..	..	..	15,363	14,685
	At least 2 years and under 5	..	..	..	..	32,520	33,583
	Eye cases	..	..	..	..	317	350
	Ophthalmia Neonatorum	..	..	..	..	48	136
	Other special visits	..	..	..	..	8,160	5,221
	Blank visits	..	..	..	..	14,404	17,076
	Problem families	..	..	..	..	973	1,124
	Unmarried mothers	..	..	..	..	372	450
	Premature babies	..	..	..	..	2,879	2,232
	<i>Sessions attended:—</i>						
	Clinics	..	..	..	..	7,318	6,386
	Nursery Schools and classes (hours)	..	..	..	..	1,876	1,735
(e)	<i>Inspection of Midwives and Nursing Homes:—</i>						
	<i>Visits:—</i>						
	1. Midwives Acts—						
	Routine	..	..	..	..	106	72
	Special	..	..	..	..	223	154
	2. Home conditions	..	..	..	..	64	59
	3. Blank visits	..	..	..	..	135	137
	4. Nursing Homes (Routine)	..	..	..	..	15	24
	5. Nursing Homes (Special)	..	..	..	..	7	17
	6. Midwives cases	..	..	..	..	155	120
(f)	<i>C.M.B. Forms:—</i>						
	A. Medical Aid	..	..	..	..	207	173
	B. Death (Neo-Natal)	..	..	..	..	2	2
	C. Stillbirth	..	..	..	..	12	16
	D. Laying out of the dead	..	..	..	..	6	7
	E. Liability of infection	..	..	..	..	22	30
	F. Artificial feeding	..	..	..	..	937	970

Table 2—Maternal and Child Welfare—Welfare Department

	1955	1956
Cases on Register at beginning of year	4,184	3,728
„ added	346	394
„ removed	802	679
„ on Register at end of year	3,728	3,443
Applications received:—		
(a) Unmarried mothers	314	368
(b) Married women	32	26
Affiliation Cases completed:—		
(a) Orders obtained	42	45
(b) Agreements arranged	16	14
Maintenance Orders (Married Women)	1	3
Assisted in application for arrears on orders	153	152
And on varying Orders	30	32
Admitted to homes:—		
(a) Expectant mothers	28	46
(b) Mothers with babies	23	49
Visits—Domiciliary:—		
(a) Ordinary	370	474
(b) After-care	725	851
Blank visits	80	49
Interviewed in hospital or homes	534	1,098
Total receipts	£15,315	£16,711
„ disbursements	£15,351	£16,696

Table 3—Sunlight Treatment

Central Clinie	1955	1956
<i>Artificial Sunlight:—</i>		
<i>New Patients—</i>		
Adults	—	—
School children	231	142
Pre-school children	233	161
<i>Treatments—</i>		
Adults	—	—
School children	2,122	1,265
Pre-school children	2,317	1,399

Table 4—Eye Clinic

	New Patients		Attendances	
	1955	1956	1955	1956
School children	1,592	1,639	6,718	7,244
Pre-school children	83	91	235	266
Totals	1,675	1,730	6,953	7,510

Table 5—Orthopaedic Department

	Patients		Attendances	
	1955	1956	1955	1956
Inspections:—				
M. & C.W.	95	90	128	112
School	762	739	1,231	1,130
Totals	857	829	1,359	1,242
Treatment:—				
M. & C.W.	39	50	1,201	1,585
School	427	436	5,016	6,219
Totals	466	486	6,217	7,804

Table 6—Foot Clinic

	Patients		Attendances	
	1955	1956	1955	1956
M. & C.W.	11	5	14	6
School	1,071	1,278	4,854	6,032
Totals	1,082	1,283	4,868	6,038

Table 7—Ear, Nose and Throat Department

	Patients		Attendances	
	1955	1956	1955	1956
Inspections:—				
M. & C.W.	70	59	85	71
School	1,151	1,022	1,976	1,796
Totals	1,221	1,081	2,061	1,867
Treatment:—				
M. & C.W.	7	4	56	10
School	135	100	1,980	1,356
Totals	142	104	2,036	1,366

Table 8—X-Ray Department

The following is the number of X-rays carried out at the Central Health Clinic during 1955 and 1956:—

	1956	1955
<i>School Health Service:—</i>		
Referred from Minor Ailment Clinics, etc.	731	872
Referred by consultants—		
E.N.T.	698	1,154
Orthopaedic	290	
Teachers periodic X-ray of chest	586	1,112
<i>Tuberculosis Service:—</i>		
Adult contacts	244	
Child contacts	1,275	3,384
Children inoculated with B.C.G.	1,930	
<i>Maternal and Child Welfare Service:—</i>		
Children under 5	30	16
Mothers—X-ray of chest	3,704	3,631
„ X-ray of abdomen	279	286
<i>Staff Medical Examinations and Periodic X-rays (excluding teachers)</i>	2,860	2,657
<i>Miscellaneous</i>	182	181
Total No. of films taken	12,809	13,293
Total No. of persons X-rayed	11,650	11,905

Table 9—Scabies Baths

	Central Clinic		Feeder Road		Totals	
	1955	1956	1955	1956	1955	1956
School children	74	118	—	—	74	118
Children under 5	34	32	—	—	34	32
<i>Adults—</i>						
Females	43	82	—	—	43	82
Males	—	—	12	—	12	—
Total Attendances	151	232	12	—	163	232
<i>* New Patients:—</i>						
School children	39	60	—	—	39	60
Children under 5	17	18	—	—	17	18
<i>Adults—</i>						
Females	23	43	—	—	23	43
Males	—	—	7	—	7	—
Total New Patients	79	121	7	—	86	121

* Included in "Total Attendances".

Table 10—Dispensary

						1956
(1) Establishments served:—						
Health Centres and Clinics (35)						
Residential Institutions (26)						
Day Nurseries, Day Special Schools:						
Nursery Schools and Classes (39)						
Other Establishments (19)						
Municipal Midwives (37)						
School first aid sets (671)						
Gas and air apparatus servicing (1,687)						
(2) Turnover of Drugs, Dressings, etc.:—						
Quantity of mixtures made	..	..	gallons	..	..	359
Quantity of ointment made	..	..	lb.	..	..	514
Quantity of powders made	..	..	lb.	..	..	36
Other Medicines dispensed	..	..	gallons	..	..	499
Vit A. & D. Emulsion	..	..	gallons	..	..	132
Vit. A. & D. Capsules	..	..	caps.	..	..	18,000
Whooping Cough Vaccine	..	..	c.c.	..	..	2,450
Whooping Cough/Diphtheria Vaccine	..	..	c.c.	..	..	17,100
P.T.A.P. Diph. Proph.	..	..	c.c.	..	..	3,170
Tetanus Toxoid	..	..	c.c.	..	..	493
Tetanus / Diphtheria / Whooping Cough vaccine	..	..	c.c.	..	..	2,670
Lint and Cotton Wool	..	..	lb.	..	..	1,283
(3) Bulk purchase of drugs:—						
			lb.	..	..	1,180
			gallons	..	..	292
			tabs.	..	..	625,000

Table 11—Diphtheria Immunisation

	1955			1956		
	Local Au'thy	G.P.	Total	Local Auth'y	G.P.	Total
Diphtheria (whether combined with Whooping Cough or not)						
Number of immunisations completed at Schools, Clinics and Nurseries and by General Practitioners during year.						
Full course:						
Under 5 years of age	2,551	1,873	4,424	2,280	2,072	4,352
Between 5 and 15 years of age	72	85	157	31	44	75
Booster dose:						
Under 15 years of age	1,455	1,210	2,665	1,142	1,268	2,410

Table 12—Whooping Cough Vaccination

	1955			1956		
	Local Auth'y	G.P.	Total	Local Auth'y	G.P.	Total
Whooping Cough (whether combined with Diphtheria or not) Number of vaccinations completed at Schools, Clinics and Nurseries and by General Practitioners during year.						
Full course:						
Under 5 years of age ..	2,535	1,880	4,415	2,175	2,047	4,222
Between 5 and 15 years of age	60	128	188	27	64	91
Booster dose:						
Under 15 years of age ..	58	403	461	160	592	752

Table 13—Day Nurseries

No. on Register 31.12.55	No.	Places Provided 31.12.56	No. added to Register	No. removed from Register	No. on Register 31.12.56	Waiting List
283	7	290	444	437	290	32

Table 14—Care and After-Care, Nursing Appliances Equipment on Loan

Items	No. on Loan 31.12.56
Air rings	554
Air beds	20
Bed blocks (prs.)	10
Bed pans	588
Bed pans, rubber	21
Bed pulley	25
Back rests	502
Bed tables	6
Breast pump	10
Commodes	175
Cots, adult	4
Cradles	68
Crutches (prs.)	69
Douche cans	2
Feeding cups	91
Fracture boards	36
Inhalers	4
Matresses—Dunlopillo	32
Rubber sheets	760
Sand bags	8
Sputum mugs	84
Steam kettles	3
"T" sticks	60
Urinals—male	305
Urinals—female	119
Wheel chairs	138
Worrall walking aid	11
Total	3,706

(xiv) IMMUNISATION AND VACCINATION

Number of children who completed a full course of primary immunisation in the Authority's area (including temporary residents) in the six-months period indicated.

Diphtheria Immunisation (whether combined with Whooping Cough and/or Tetanus Immunisation or not).

	Under 5	Between 5 and 15	Total
Six months ended 30th June, 1951	2,425	529	2,954
„ „ „ 31st Dec., 1951	2,573	345	2,918
„ „ „ 30th June, 1952	2,194	114	2,308
„ „ „ 31st Dec., 1952	2,345	85	2,430
„ „ „ 30th June, 1953	2,160	886	3,046
„ „ „ 31st Dec., 1953	2,039	255	2,294
„ „ „ 30th June, 1954	2,623	740	3,363
„ „ „ 31st Dec., 1954	2,963	137	3,100
„ „ „ 30th June, 1955	2,269	89	2,358
„ „ „ 31st Dec., 1955	2,155	68	2,223
„ „ „ 30th June, 1956	1,930	26	1,956
„ „ „ 31st Dec., 1956	2,422	49	2,471
Whooping Cough Immunisation (whether combined with Diphtheria and/or Tetanus Immunisation or not)			
Six months ended 30th June, 1954	3,206	252	3,458
„ „ „ 31st Dec., 1954	3,378	170	3,548
„ „ „ 30th June, 1955	2,312	89	2,401
„ „ „ 31st Dec., 1955	2,103	99	2,202
„ „ „ 30th June, 1956	1,876	41	1,917
„ „ „ 31st Dec., 1956	2,346	50	2,396

Number of Persons Vaccinated (or re-vaccinated) 1956

Age at time of Vaccination	Under 1 year	1—	2—	5—	15 and over	Total
Number vaccinated ..	2,062	89	99	91	141	2,482
Number re-vaccinated ..	219	5	23	38	276	561

2. DENTAL CARE

W. H. B. Stride
(*Senior Dental Officer*)

Mothers and Young Children

Dental examination was carried out for expectant and nursing mothers and young children at seven main health centres during the year. Treatment is offered to those recommended by the doctors at ante-natal and post-natal sessions, and to patients requesting treatment or sent up by the nursing staff and health visitors.

Emergency treatment is available at all times.

The number of mothers inspected was 695 as against 673 last year, and the number treated 669 as against 687 last year; 503 sessions were devoted to this side of the work.

Staff

The staff of full-time officers was reduced to six at the end of June by the resignation of Mr. D. J. Rees. Three full-time officers were appointed during the year however:—Mr. Sellin on July 2nd, Mr. Everard on September 17th and Miss Shinkwin on November 12th.

Two more full-time officers were appointed to take up duty in January 1957.

Clinics

The new clinic, the Charlotte Keel Clinic, was opened in Claremont Street at the beginning of the year and Maternal and Child Welfare work commenced in July, when Mr. Sellin was able to take up his duties. This clinic is very convenient for those who live in this busy area and will be of great help in the work.

Dental Technician

Mr. Wheeler, the dental technician who was working in a temporary capacity at Lawrence Weston, commenced at the new workroom in Claremont Street in March.

During the year a total of 136 full and 69 partial dentures were constructed, and in addition 5 repairs were carried out.

Oral Hygienist

The work of the oral hygienist has continued without interruption; instruction is given to individual mothers, and talks are arranged at ante-natal sessions. The work continues to be very much appreciated and is found to result in increased attention to the teeth and to oral conditions generally.

Everything possible is done to try and get the mothers keenly interested in the importance of oral hygiene so that they will in future visit their own dentists regularly.

The number of treatments and scalings carried out for mothers was 323.

Numbers Provided with Dental Care				
	Examined	Needing Treatment	Treated	Made Dentally Fit
Expectant and Nursing Mothers	695	681	669	630
Children under Five	1,788	1,755	1,768	1,619

Forms of Dental Treatment Provided									
	Scalings & Gum Treat- ment	Fillings	Silver Nitrate Treat- ment	Crowns or Inlays	Extrac- tions	General Anaes- thetics	Dentures Provided		Radio- graphs
							Full Upper or Lower	Partial Upper or Lower	
Expectant and Nursing Mothers ..	323	726	—	2	1,692	444	136	69	41
Children under Five ..	—	264	1,541	—	2,695	1,422	—	—	—

3. THE MENTAL HEALTH SERVICES

Dr. H. Temple Phillips

(Chief Assistant Medical Officer of Health and Senior Medical Officer for Mental Health)

and

F. Morton

(Mental Health Officer)

Introduction

The staff of the mental health section continued to be busily employed during 1956.

The number of cases of mental illness referred to the section (747) fell one short of that for 1955. Whilst it would have been pleasing to report a larger decrease, it is some satisfaction that the reduction from the higher figures of 1952-54 has been maintained. On the other hand, of those so referred, the number admitted to mental hospitals rose from 303 in 1955 to 369 in 1956. The total number of patients admitted to mental hospitals—including those admitted as voluntary patients direct from psychiatric out-patient clinics, etc.—rose from 742 in 1955 to 843 in 1956.

As far as mental illness is concerned, the main difficulty continued to be the serious shortage of mental hospital beds, with resultant blocking of the "observation" beds at Manor Park Hospital. The work of the mental welfare officers is greatly hampered in this way, and they often have to spend valuable hours—frequently in the middle of the night—in seeking hospital accommodation for urgent cases. On several occasions during the year the position became so serious that the service was in danger of breaking down. The matter was considered by the Health Committee, and on the 5th September, 1956, a deputation from the Local Authority, Regional Hospital Board, and the Local Medical Committee, attended the Ministry of Health to discuss the difficulties. As a result of the meeting, the South Western Regional Hospital Board was asked by the Ministry to intensify its efforts to increase the provision of mental hospital beds in the region. The question of the provision by local health authority of a hostel for mental defectives was also discussed, but it was stated that loan sanction for capital expenditure in this connection could not at present be approved by the Minister of Health.

The number of cases referred to the section as mentally defective during 1956 was three less than in 1955. The total number of mental defectives known to the local authority at the end of the year fell from 1887 in 1955 to 1795 in 1956. This substantial reduction was achieved mainly by the discharge of patients no longer requiring statutory supervision or friendly after-care. One of the most satisfying aspects of mental deficiency work is the sight of patients, after long years of supervision, learning to manage their own affairs.

On the mental deficiency side, the most pressing problem is the increasing demand for attendance at Marlborough House occupation and industrial centre. As a temporary measure, it was agreed in October to carry out certain structural alterations which will relieve to some small extent the overcrowding in the industrial centre. It is clear, however, that the only satisfactory solution to the problem will be the provision in the near future of a completely new occupation centre in Bristol. This was

agreed to in principle by the Health Committee as long ago as January 1950.

There are no major changes to report during 1956, though a great deal of work was carried out in connection with proposed future developments. Following an approach to the Ministry of Health, the local authority was informed that loan sanction for the acquisition and adaptation of premises for a mental deficiency hostel would not at present be forthcoming, owing to current restrictions on capital expenditure. The search for suitable premises which might be rented, either for this purpose, or for a social and diversional therapy centre for the elderly, has continued, so far without success.

In November 1956, following the meeting at the Ministry of Health already referred to, the Health Committee decided to press again for vacant possession of Mortimer House and Nos. 11 and 12 Mortimer Road, Clifton. These premises, though owned by the Local Authority, are at present leased to the Minister of Health as a maternity hospital and nurses' home (with the exception of the ground floor of Nos. 11 and 12 Mortimer Road, which is used as a Local Authority health clinic). If made available, the premises would provide a hostel for male mental defectives, a social and diversional therapy centre for the elderly, and an administrative headquarters for the mental health service.

A comprehensive report concerning the development of the mental health service, with particular reference to the possible preventive aspects of mental ill-health, was presented to the Health Committee at its meeting on the 14th November, 1956. The scheme envisages the appointment of two part-time psychiatrists, who would be available for consultation and also take part in the in-service training of local authority workers; an increase in the establishment of psychiatric social workers from one to five—the psychiatric social workers to work closely with the psychiatrists, take part in infant welfare work, and attend area case committees; the appointment of two assistant mental welfare officers; the decentralisation of the mental health service, which would in future be based on five main health clinics; and the offering to the Regional Hospital Board of facilities for providing out-patient sessions in local authority clinics. These recommendations were approved by the committee, and will form the basis for development in the future.

We would once again like to express our appreciation of the loyal support given during the year by all the staff—both full-time and part-time; and of the valuable help again so freely given by medical practitioners, officers of the Regional Hospital Board and mental deficiency and mental hospitals, officers of other Corporation departments, and representatives of the various voluntary bodies.

Establishment and Staff

These were set out in full in last year's annual report.

The only change in establishment during 1956 was that the post of part-time speech therapist was made a full-time one.

Staff changes during the year included:—

The retirement in March of Mr. A. H. Jordan; he had served the authority since 1935 as a relieving officer and later as a duly authorised officer;

The appointment, in April, of Mr. K. R. Pennington to the new post of Deputy Mental Health Officer; previously employed on mental welfare

duties in South Gloucestershire, his local knowledge enabled him very quickly to assume his new responsibilities;

The resignation of Miss B. Bolwell, part-time speech therapist, in August; and the appointment to the new full-time post of Mrs. M. I. J. McQuade; Mrs. McQuade had previously worked as a speech therapist under the Armagh County Health Authority;

The appointment in February of Miss M. L. Reece to the vacant post of occupational therapist.

Among the occupation centre assistant supervisors, Miss F. G. Gillman retired after 15 years' service, and Miss J. Randall left to take up another post. The vacancies were filled by Miss R. Adams and Mrs. B. C. Luscombe.

Training Courses, etc.

A refresher course for workers in the various branches of the mental health service was held, in collaboration with the Department of Preventive Medicine, University of Bristol, from 9th to 13th April, at Rodney Lodge, Clifton. The theme of the course was "Mental Health in the Community", and four members of the staff attended.

During the spring term a course on the care and training of mentally handicapped children was arranged in collaboration with the Bristol Education Authority (Institute of Further Education). The course was a practical one, designed primarily to give help to a hitherto somewhat neglected group, i.e. the parents of very young mental defectives. The syllabus included such subjects as community care, music and movement, handwork, occupation centre training, nature study, physical training, speech training, "stories and how to tell them", and "understanding of the child". The course was keenly appreciated by the twenty-five parents who attended, and at the end of the year arrangements were in hand to hold a second course on somewhat similar lines early in 1957.

Following prolonged discussions with this and other authorities in the South West, the National Association for Mental Health decided to hold in Bristol a two-year "in-service" diploma course for teachers of the mentally handicapped, commencing in October, 1956. With the consent of the local authority, three of the Occupation Centre Assistant Supervisors are attending this course.

As in previous years, educational visits have been paid to the section by doctors, students, social workers, etc. from many departments at home and overseas. Numerous lectures have also been given by the staff during the year at the request of various local organisations.

Mental Deficiency

At the end of 1956, there were 1795 mental defectives known to the local health authority. This represents a total mental deficiency rate of 4.07 per thousand population, as compared with 4.26 per thousand in 1955.

The number formally receiving care under the Mental Deficiency Acts was 1680. This represents a rate of 3.81 per thousand, as compared with 3.9 per thousand in 1955.

Of the 1680 formally ascertained cases, 678 (40 per cent.) were in hospital or on licence from hospital, and 1,002 (60 per cent.) were receiving community care from the local health authority.

Details of the number of mental defectives under care since 1949 are given in the following table:—

Year	In Hospital and on Licence	Under Statutory Supervision	Under Guardian- ship	Receiving Voluntary After-Care	Pending Formal Ascertain- ment
1949	676	736	65	72	29
1950	678	804	56	116	24
1951	685	857	54	147	17
1952	670	876	43	210	15
1953	665	932	51	105	58
1954	657	972	46	113	59
1955	669	1,013	42	116	47
1956	678	962	40	91	24

It will be seen that, though there was a slight increase in the number of patients in hospital and on licence, it was found possible to reduce the number requiring statutory supervision and voluntary after-care.

Waiting List

At the commencement of 1956 there were 16 names on the list of persons awaiting admission to mental deficiency hospitals; during the course of the year 28 names were added, making a total of 44.

These were dealt with as follows:—

Removed after admission to mental deficiency hospital	23
Removed, application withdrawn	6
Admitted to mental hospital	1

leaving 14 cases awaiting vacancies at the close of the year.

Twelve urgent cases were admitted to hospital during the year in addition to those admitted from the waiting list, making a total of 35 admissions during 1956.

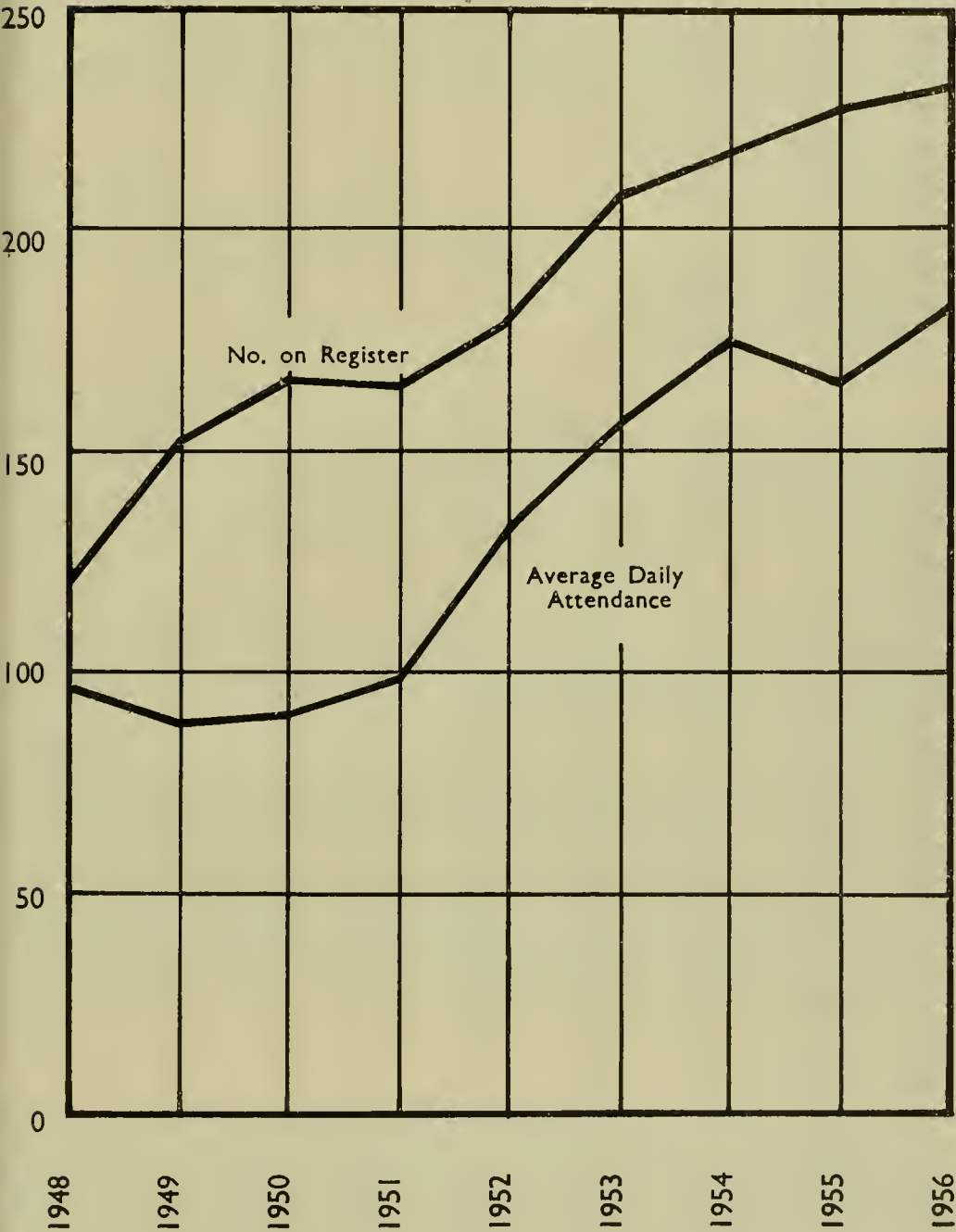
Temporary Care

The provisions of Ministry of Health Circular 5/52, permitting the admission of mental defectives to residential care for a period of not more than two months without formality has again proved of great value to parents and guardians, who experience the need for a temporary respite from the constant strain of caring for low grade defectives at home.

Temporary arrangements have been made as follows:—

Admissions during 1956 under M.O.H. Circular 5/52			
	Male	Female	Total
To Hortham & Brentry Hospitals ..	9	5	14
To Stoke Park Group	4	5	9
To Sandhill Park Hospital	—	1	1
To Starcross Hospital	2	—	2
Totals ..	15	11	26

Graph showing Numbers on Register and Average Daily Attendance at the Occupation and Industrial Centre 1948-1956



The following are the figures for temporary admissions for the past five years:—

1952	..	..	3
1953	..	..	15
1954	..	..	16
1955	..	..	26
1956	..	..	26

Marlborough House Occupation and Industrial Centre

The following number of patients were on the register at the end of 1956:—

	Male		Female	
	Under 16	Over 16	Under 16	Over 16
Occupation Centre	66	—	44	72
Industrial Centre	—	52	—	—

The total number of patients on the register at the end of the year (234) and the average daily attendance during the year (183) are the highest on record, and the steadily increasing demand for places is well illustrated by the accompanying graph. The need for new accommodation has already been referred to in the introduction to this section of the report.

The increasing demand for occupation and industrial centre accommodation is due to three main factors:—

- (i) The steady influx of new cases referred by the Local Education Authority and transferred from private schools;
- (ii) The tendency to keep more mental defectives in the community rather than admit them to hospital (a policy which is often followed in the patient's own interests but which may also be dictated by shortage of hospital beds);
- (iii) The increasing difficulty of finding and keeping suitable employment for the older patients (i.e. those over 16). There is a tendency for many who have been employed to find themselves redundant, and this is a problem which may easily become more acute as a result of fluctuations in the labour market.

Health of Patients

During the year, the centre has been fortunate in that not a single case of infectious disease has been reported. By arrangement with the Principal School Medical Officer, routine medical inspection (on the lines of school medical inspection) has been carried out and physical needs referred to the patients' general practitioners. When necessary, full use is made of the facilities offered by the consultant and specialist services available in the Central Health Clinic.

The day-to-day needs of the patients have been met by regular weekly examinations by the health visitors.

From May 1954 to 31st August 1956, a scheme was in operation whereby the cost of milk supplied in occupation centres was refunded by the Ministry of Agriculture, Fisheries and Food. On the cancellation of this scheme, the Committee resolved that milk should continue to be supplied to those children under the age of 16 years attending the occupation centre and that the cost should be borne by the Health Committee.

Psychologist's Report

The following is a summary of the year's work:—

- | | | |
|--|-------------------|---|
| 1. Routine Testing | .. 64 tests given | { 46 Terman Merrill (Revised Stanford Binet) |
| | | { 18 Wechsler Bellevue Form I (this includes performance material) |
| 2. Tests of adults re admission to centre, certification, etc. | | 9 tests given at occupation centre;
5 tests given at home or hospital. |
| 3. Tests for reports to Youth Employment Officer | .. .. . | 5. |
| 4. Retests of children in centre for special reasons | .. .. . | 3. |
| 5. Interviews with parents | .. .. . | 4. |
| 6. Home Visits | .. .. . | 3. |

During the year, routine testing of the children in the centre has been continued, so that apart from some new admissions all the children under 16 and the adult women have now been seen at least once. Where children have not been making satisfactory progress, or have some special difficulty, parents have been interviewed.

Two children were returned to the education system, under Section 8 of the *Education (Miscellaneous Provisions) Act, 1948*.

Those reaching the age of 16 have been interviewed, and results sent to the Youth Employment Officer. So far one of these has obtained a job and one other is considered suitable for outside employment.

Outside referrals have been increasing, and altogether, 14 adults have been seen regarding certification or admission to the occupation centre.

Speech Therapist's Report

Up to August 1956, the speech therapist was only attending during the afternoons. Since September there has been a full-time speech therapist. This allows more time for individual treatment, which is very necessary with this type of work.

All the children have received speech exercises, given daily by the teachers, and supervised by the speech therapist. In addition, thirty-seven of the children with speech defects (as distinct from just poor speech) were selected for individual treatment twice a week, and in some cases

more often. These children were chosen mainly from the younger groups, as it was decided that they would derive most benefit. However, there are three adult girls and once adult boy receiving treatment.

The individual treatment is more likely to succeed if the co-operation of the parent is gained. In order to achieve this, some of the parents have already been interviewed, and it is hoped to meet the remainder early in 1957. The children are given exercises which it is hoped they will carry out at home.

The majority of the patients suffer from dyslalia and hyper-nasality. A few of the infant class are suffering from alalia, due in some cases to general retardation. There are two stammerers receiving treatment.

A case history form has been drawn up, and the aim is to keep a detailed report of progress.

Margaret Morris Movement

The Margaret Morris movement classes at Marlborough House are making steady progress along the lines indicated in last year's report.

Class A. This is a large class of up to 20 girls, and a pleasure to teach. They are learning to sustain effort and to work at an exercise or sequence until improvement is made. Many of the girls lead well and some enjoy creative work. In the latter, one female patient is outstanding.

Class B. The range of ability in this class is very wide. In the circumstances the progress is most satisfactory, each girl increasing her mental and physical ability, whilst the group responsibility is marked.

Class C. These little girls have improved a great deal both in individual and group co-ordination. They are also beginning the transition from what may be termed the "nursery" to the "junior" approach.

Social Activities, etc.

Social activities have continued to occupy a prominent place in the occupation centre programme, and have claimed much time and effort on the part of the staff. They are looked upon not only as entertainment for the patients, but as a valuable part of their training.

Two open days were held at Marlborough House during the year, and parents and friends were made welcome. A harvest festival service was held at St. James' Church in October, and at Christmas the activities included, as usual, a nativity play and carol service, a pantomime acted by the children, and Christmas parties for the children and older patients. On the 2nd November, members of the Staff accompanied patients to a firework display at the Bristol Rovers' Football Ground, organised by Uncle Bob of the *Bristol Evening Post*. Early in the year, an officer of the Bristol Constabulary attended on a number of occasions to show "safety first" films. Regular swimming sessions were again arranged for selected patients at Kingsdown Baths.

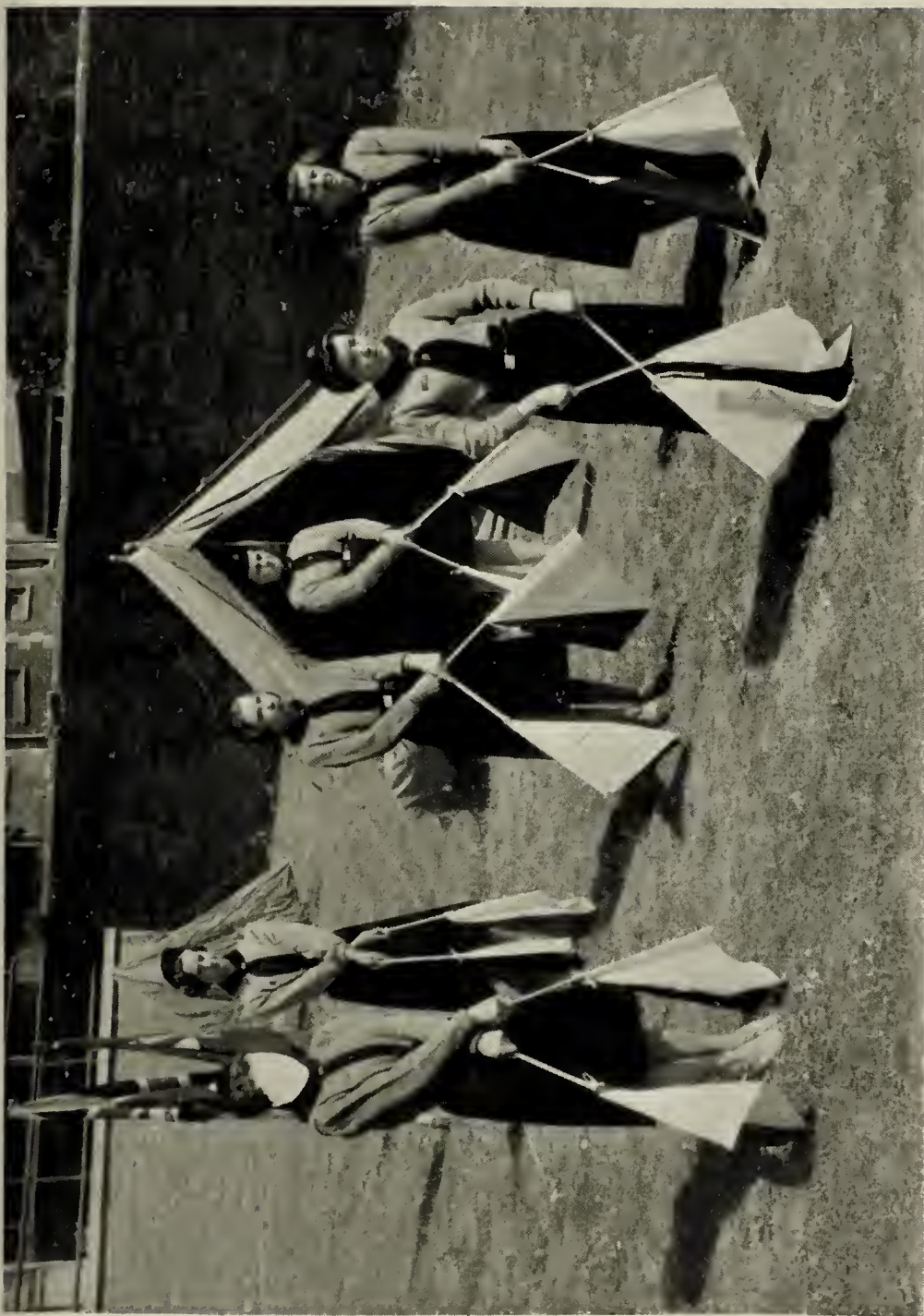
Nearly a hundred patients, accompanied by members of the staff, attended the annual summer camps. Two one-week camps were held at Winscombe during July, and were attended by 20 girls and 19 boys



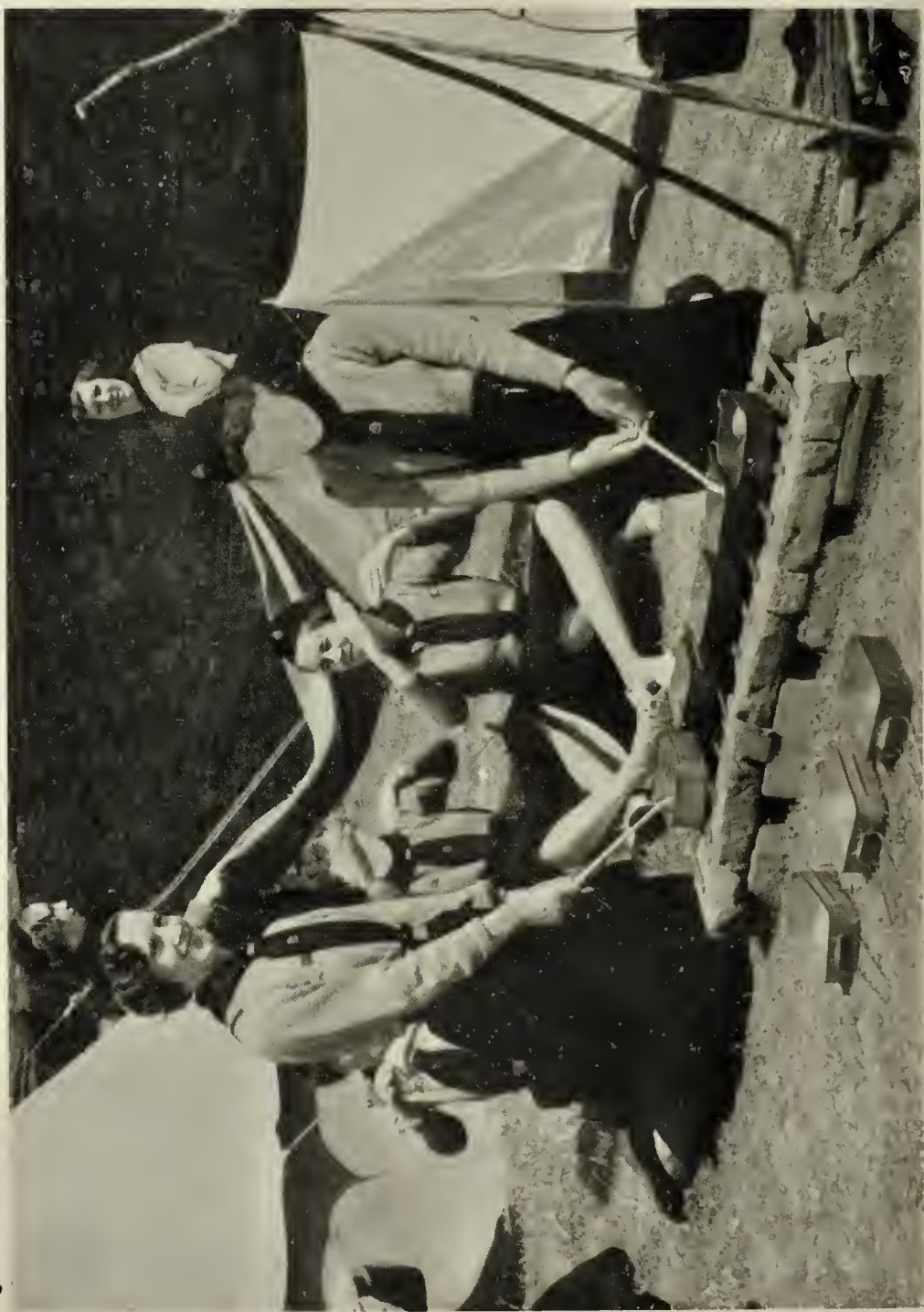
Occupation Centre—Rest Time in the Nursery Class



Wolf Cubs at the Occupation Centre—Camp training



68th Bristol (Marlborough House) Ranger Company—Signalling training



Rangers set up their camp-fire in the grounds of the Occupation Centre

respectively (all under 16). The first mixed camp was held at Exmouth during the last week of August, and was attended by 23 senior girls and 34 senior boys.

The Marlborough House Parent-Teacher Association continued to be active during 1956, and now has a membership of 180. Regular meetings were held, and funds were raised by a jumble sale and garden party. A record player was purchased and presented to the centre, and a net-ball set and other equipment were also provided.

The Scouts, Cubs, Girl Guides, and Rangers continued their activities during the year.

After-Care of Mental Defectives

Quarterly visits have been made to those patients discharged from order of the Mental Deficiency Acts who are willing to accept the offer of timely help and friendly advice. Efforts have been made during the year to widen our contact with employers, and it has often been possible to place a man or woman in a suitable job through personal contact with a sympathetic employer. The meetings held by the Ministry of Labour and National Service at their central offices have been useful in providing current information about the types of courses available at their training centre, and in enabling social workers in the area to bring forward their common problems relating to employment. At one meeting a full discussion was held on the difficulties encountered when attempting to place epileptic persons in suitable work. Where necessary, patients have been registered as disabled persons and during the year several have attended the Industrial Rehabilitation Unit, whilst some have completed training courses.

An attempt has been made to group after-care cases according to the amount of work needed in order to affect some improvement in existing conditions. Whereas some persons and families respond to occasional visits, others need more intensive help before progress can be made. At the far end of the scale are those families who, because of their constant difficulties, are classed as "special" or "problem" families. In these cases, because of the complexity of the problems, several social workers may be calling upon them and it has been invaluable, therefore, for these workers to meet and discuss the problems at the central and area case conferences. In this way, valuable casework is being done with the families and, in time, considerable progress can be made.

It is anticipated that there will be a tendency towards an increase in the number of mental defectives receiving after-care, following the issue of M.O.H. Circular 56/25, which lays down that patients on licence from mental deficiency hospitals should be discharged as soon as this is warranted, and that it is expected that patients will be discharged after they have been on licence for 12—18 months at the most unless there are overwhelming reasons to the contrary.

At the end of 1956 there were 91 cases (51 male and 40 female) on the mental deficiency after-care register. A total of 577 visits were made to these persons.

The following case reports indicate the type of difficulties which may result from a policy of early discharge from order of mentally defective patients:—

Case No. 1

This patient was placed under order and admitted to hospital in 1950, having been found neglected. She was licensed to a domestic situation in 1952 and held this job until her discharge in 1956. She is 51 years of age and her I.Q. is 42. She cannot read or write and is immature.

Very shortly after her discharge, she made a nuisance of herself in her situation and was dismissed. She was quite unable to make any decision about her future and even found difficulty in finding her way about the city.

It has been extremely difficult to find suitable work for her and to encourage her to retain her employment. At present, she is in residential employment.

Case No. 2

This patient, now aged 21, was brought up in a mental deficiency hospital, as home conditions were very poor. She was placed out in employment and managed to keep her job, although her mental age was only 6 years 10 months. When she was 21, she was discharged from order, and shortly afterwards became unsettled in her employment, eventually leaving to take a job as a maid at one of the large hospitals. After discharge, she found herself in the position of being able to do more or less as she pleased, and for some time has been in the habit of associating with undesirable men. Despite efforts of the after-care officer she has now become engaged to one of the latter.

Case No. 3

This patient, now aged 24, was admitted to hospital in 1949. Home conditions were very poor, the mother being separated from her husband and living with another man.

She was licensed to the care of her mother in 1954, but owing to the home situation she returned to the hospital for a short time, and was eventually discharged from order in 1956. She has a high I.Q. and a pleasant manner, but is lacking in self-discipline and discernment. She took poor squalid lodgings and became friendly with a group of coloured people, with one of whom she eventually began to live. She has since deteriorated both physically and mentally.

Great difficulty was experienced in even contacting this girl, since she changed her lodgings week by week, but when she was found, she was willing to co-operate and was placed in a hostel. She now has a regular job and has given up her former companions. It is felt, however, that in view of her past connections and inclinations, she needs more discipline than can be afforded by after-care to keep her out of moral danger.

Case No. 4

She is a high grade girl, now aged 28, who made satisfactory progress whilst on licence but has deteriorated since being discharged from order. Whilst under licence, she received supervision regarding her personal cleanliness, and had a pleasing appearance, but after discharge she went to live with her old illiterate father and both the house and the patient deteriorated rapidly. They have since been rehoused and a little improvement has been made in the home conditions, but the patient is quite unable to supervise her own personal hygiene and clothing. In addition, without the discipline of licence, she has led an immoral life and given birth to two illegitimate children. Efforts to obtain the father's consent for readmission to hospital have failed. The health visitor has shown concern about the condition of the children and they have, as a temporary measure, been placed in a day nursery.

Case No. 5

This man was discharged from Order in 1955. He is 29 years of age, with an additional double disability of asthma and epilepsy. His mother is separated from her husband and in poor financial circumstances. Because of his disabilities, the patient is unable to earn more than about £5 gross per week, and the mother ekes out the income by doing domestic work. They have to pay a high rent, their flat being taken specifically because of its elevated position, which helps the patient's asthmatic condition.

The past history of the patient shows violent temper outbursts and anti-social tendencies. He has so far managed to keep his job, but it is felt that he will need constant advice in view of the family circumstances and his double handicap.

Case No. 6

This man, now aged 26, was admitted to a mental deficiency hospital in 1948 as being a feeble-minded person requiring care and training. In 1954 he was licensed to the care of his sister, and was discharged from order in 1955. Since his discharge, there has been deterioration. He has not kept his employment for more than a week or two at a time, and has been inclined to make undesirable friends. He came before the court on a charge of theft and was bound over to be of good behaviour for 12 months. At this time, he was medically examined, with a view to being placed under supervision, but owing to his high I.Q. could not be dealt with in this way. He has now gone to live with his mother who, although she tries to give him some advice, is really quite ineffective. Despite close supervision by the after-care officer, this young man wears unconventional clothing and frequents coffee bars and public dance halls of the less desirable type. It is felt that he will inevitably get into further trouble.

He shows no discernment in choosing friends, either male or female. Recently he became friendly with a young girl of 14 years, but his mother did manage to intervene on this occasion and ended the friendship.

Mental Illness

The number of cases referred to the mental welfare officers during 1956 was almost exactly the same as in 1955, but the total number of admissions to mental hospitals increased from 742 in 1955 to 843 in 1956. Detailed statistics are given in the tables at the end of this report; in addition to the hospital admissions shown in Table VIII, 474 persons entered mental hospitals as voluntary patients by direct arrangements with consultant psychiatrists.

Voluntary admissions accounted for 74 per cent. of all admissions to mental hospitals in 1956, and of the Bristol patients in mental hospitals at the end of the year, 36 per cent. were voluntary patients.

Allusion has already been made to the serious difficulties encountered by the mental welfare officers as a result of the shortage of mental hospital beds.

After-Care—Mental Illness

Regular visits have been maintained to psychiatric after-care cases in the area; these are either persons discharged from H.M. Forces on psychiatric grounds, or persons discharged from mental hospitals outside the Bristol area who need help and guidance to rehabilitate them in the community. At the end of 1956 there were 48 psychiatric after-care cases on the register and a total number of 317 visits were made to these persons.

Diversional and Social Therapy Unit, Southmead

The Diversional and Social Therapy Unit at Southmead provides afternoon club facilities and occupational therapy for adults who, by reason of their disability, are unable to benefit from other forms of occupation or opportunity for companionship. Opened in September 1953, the unit has continued to flourish and we were glad to welcome to the staff of the unit an occupational therapist in March 1956. We are now able to open the unit on five afternoons each week.

Attendance at the unit is purely voluntary and during the year the members put in a total of 1,263 attendances. Members come from all parts of Bristol and are normally expected to use the public transport services. This is itself an exercise of courage for people who have only found life tolerable in the sheltered environment of a hospital or the

isolation of their own homes. Fares are refunded by the local health authority as in most instances National Assistance is their only source of income.

In 1956, we have again experienced a satisfying loss of members amongst those able to take up employment and outside activities and no longer needing the support of the unit. From the list set out below, however, it will be seen that of the thirteen members who have left during the year, three have entered hospital for further treatment. It is also interesting to note when referring to the list of new members, that about 25 per cent. have not received mental hospital treatment.

Members who have left the Unit during 1956

In full-time competitive employment	4
In sheltered employment (Lord Roberts' Workshop) ..	1
Registered for employment but unemployed	1
Attending Industrial Rehabilitation Unit	1
Home duties and other clubs	1
Receiving in-patient treatment—Mental Hospital ..	3
Left of own accord	2

At the beginning of the year, we had 19 members on the register. During 1956, 15 new members have been referred from the following sources:

Referred by:—

Social Workers in Mental Hospitals	5
Mental Welfare Officers	6
Family Service Unit	2
Educational Psychologist	1
Another member of the Unit	1

We are again grateful to the voluntary helpers upon whom we are very dependent for the success of this venture. They attend as club members, welcome new members, and bring fresh topics of conversation in an attitude of kindly acceptance which is readily adopted by the other members. The majority of the voluntary workers are members of Townswomen's Guilds, and they contribute a very high standard of ability in various handicrafts, in addition to their social assets.

Suicide

During 1956, 49 suicides were reported to the coroner, and 48 attempted suicides to the police. These figures relate only to Bristol residents who committed or attempted suicide in Bristol. Comparable figures since 1946 were given in last year's annual report.

The following table is an analysis of the 1956 cases.

	Suicide		Attempted Suicide		Total		M. & F.
	M.	F.	M.	F.	M.	F.	
Poisoning:—							
Coal Gas	21	15	5	7	26	22	48
Aspirin	—	1	—	2	—	3	3
Narcotic	1	2	1	4	2	6	8
Unspecified "tablets" ..	—	—	5	7	5	7	12
Liniment	—	—	1	—	1	—	1
Spirits	—	—	—	1	—	1	1
Drowning	—	—	2	—	2	—	2
Cutting throat	2	1	1	1	3	2	5
Cutting wrists	—	—	3	—	3	—	3
Hanging	3	—	—	1	3	1	4
Jumping from window ..	—	—	1	—	1	—	1
" " rocks ..	—	2	—	—	—	2	2
" " bridge ..	1	—	—	1	1	1	2
Strangulation	—	—	—	5	—	5	5
Totals ..	28	21	19	29	47	50	97

The age incidence was as follows:—

	Suicide		Attempted Suicide	
	Male	Female	Male	Female
Under 20 ..	—	—	1	—
20—29	1	1	3	1
30—39	4	2	3	10
40—49	6	6	4	6
50—59	5	7	5	3
60—69	4	2	2	4
70—79	2	2	1	3
80+	6	1	—	2

The fact that there were 7 successful and 2 attempted suicides in persons over 80 is a sad reminder of the loneliness of old age.

Suicide is well-known to be commoner in men than in women, and during the past three years 55 per cent. of suicides have been in the male sex. On the other hand, 53 per cent. of attempted suicides have been in women.

Coal-gas poisoning is by far the most popular method of committing suicide, and has in fact accounted for 110 (70 per cent.) of the 158 successful suicides reported during the past three years.

Statistical Tables

(i) **Total Mental Defectives known to Local Health Authority at 31st December, 1956**

<i>(a) Under Mental Deficiency Acts:</i>				<i>Male</i>	<i>Female</i>	<i>Total</i>
In hospitals and on licence	..	..		340	338	678
Under guardianship	..	..		24	16	40
Under statutory supervision	..	..		539	423	962
			Totals	903	777	1,680
<i>(b) Not under Mental Deficiency Acts:</i>						
Pending ascertainment	..	..		16	8	24
Discharged from order (after-care)	..	..		51	40	91
			Totals	67	48	115
All known cases	..	..		970	825	1,795

(ii) **Cases Referred as Mentally Defective during 1956**

<i>(a) Referred by:</i>				<i>Male</i>	<i>Female</i>	<i>Total</i>
Local Education Authority	..	..		31	22	53
General medical practitioners	..	..		2	3	5
Police courts	..	..		1	—	1
Others	..	..		13	15	28
			Totals	47	40	87
<i>(b) Disposal:</i>						
Admitted to mental deficiency hospitals				3	6	9
Placed under supervision	..	..		20	21	41
Left district	..	..		2	1	3
Action not yet taken:—						
School leavers	..	..		6	4	10
Others	..	..		14	6	20
Found not to be M.D.	..	..		2	2	4
			Totals	47	40	87

(iii) **Analysis of Mental Defectives in Hospital (including those on Licence)**

	<i>Male</i>	<i>Female</i>	<i>Total</i>
At 31st December, 1955	336	332	668
<i>Added during 1956:</i>			
From statutory supervision	12	3	15
From guardianship (varying order)	1	4	5
Others	5	10	15
Total	18	17	35

Method of Admission:—

Section 3, M.D. Act	10	5	15
Section 6, „ „	5	8	13
Section 7(1) „ „	1	4	5
Section 8, „ „	2	—	2
	<hr/>	<hr/>	<hr/>
	18	17	35
	<hr/>	<hr/>	<hr/>

Removed during 1956:

Discharged by authority of Board of Control	6	3	9
Discharged by operation of law ..	1	3	4
Transferred to guardianship (varying order)	1	4	5
Died	6	1	7
	<hr/>	<hr/>	<hr/>
	14	11	25
	<hr/>	<hr/>	<hr/>

Remaining at 31st December, 1956 ..	340	338	678
	<hr/>	<hr/>	<hr/>

(iv) Analysis of Mental Defectives under Guardianship

	<i>Male</i>	<i>Female</i>	<i>Total</i>
At 31st December, 1955	26	16	42
<i>Added during 1956:</i>			
From hospital (varying order) ..	1	4	5
<i>Removed during 1956:</i>			
Discharged by authority of Board of Control	2	—	2
Transferred to hospital (varying order)	1	4	5
	<hr/>	<hr/>	<hr/>
Totals ..	3	4	7
	<hr/>	<hr/>	<hr/>
Remaining at 31st December, 1956 ..	24	16	40
	<hr/>	<hr/>	<hr/>

(v) Analysis of Mental Defectives under Statutory Supervision

	<i>Male</i>	<i>Female</i>	<i>Total</i>
At 31st December, 1955	570	443	1,013
<i>Added during 1956:</i>	28	27	55
<i>Removed during 1956:</i>			
Discharged from supervision ..	25	30	55
Admitted to Mental Deficiency hospital	12	3	15
Left district	16	10	26
Died	6	4	10
	<hr/>	<hr/>	<hr/>
Totals ..	59	47	106
	<hr/>	<hr/>	<hr/>
Remaining at 31st December, 1956 ..	539	423	962
	<hr/>	<hr/>	<hr/>

(vi) **Mental Illness: Bristol Patients in Mental Hospitals at 31st December, 1956**

				<i>Male</i>	<i>Female</i>	<i>Total</i>
Certified patients	..	..	..	383	563	946
Voluntary patients	..	..	..	233	288	521
Temporary patients	..	..	..	—	—	—
				—	—	—
		Totals	..	616	851	1,467
				—	—	—
In Dundry Villas Neurosis Unit	..			28	34	62
				—	—	—

(vii) **Persons Receiving Psychiatric After-Care from Local Health Authority at 31st December, 1956**

				<i>Male</i>	<i>Female</i>	<i>Total</i>
Ex-Service patients	..	..	..	30	3	33
Others	..	..	..	4	11	15
				—	—	—
		Totals	..	34	14	48
				—	—	—

(viii) Mental Illness: Cases dealt with by Mental Welfare Officers during 1956

A. <i>Removed to Observation Ward under Section 20 of Lunacy Act, 1890:</i>	Under 20		20—29		30—39		40—49		50—59		60—69		70—79		80 & over		All Ages	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
	Total		Total		Total		Total		Total		Total		Total		Total		Total	
Transferred to Bristol mental hospitals as certified patients	3	3	9	14	10	25	15	31	5	23	2	20	2	12	—	1	46	129
Transferred to other mental hospitals as certified patients	—	1	2	—	—	1	1	5	—	1	—	2	—	—	—	—	3	10
Transferred to Bristol mental hospitals as voluntary patients	1	1	4	4	6	16	12	15	9	20	13	9	7	10	—	—	52	75
Transferred to other mental hospitals as voluntary patients	—	—	2	—	—	1	1	1	1	1	—	—	—	—	—	—	4	3
Transferred to Bristol mental hospitals as temporary patients	—	—	1	1	1	—	—	1	—	1	—	4	—	2	—	—	2	9
Transferred to other mental hospitals as temporary patients	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
<i>Provided with care other than under Lunacy and Mental treatment Acts:</i>																		
Discharged home	—	1	7	4	3	3	4	4	8	4	12	3	2	3	2	2	38	24
Transferred to sick wards	—	1	1	—	2	1	3	—	2	8	8	14	20	26	17	38	67	62
Referred to Welfare Services Department	—	—	1	—	—	—	—	1	1	2	2	1	1	1	—	5	10	105
<i>Died before further action taken</i>	—	—	1	—	—	—	2	—	1	1	5	—	9	2	4	22	6	28
Total number of Section 20 cases	4	7	28	23	22	47	38	58	27	61	42	53	41	56	8	23	210	328
<i>B. NOT dealt with under Section 20 of Lunacy Act, 1890:</i>																		
Certified direct admissions to mental hospitals	—	—	1	1	1	—	1	1	—	2	1	1	—	3	—	1	4	9
Voluntary direct admissions to mental hospitals	—	—	—	—	2	2	—	—	—	2	2	4	—	1	—	—	4	9
Temporary direct admissions to mental hospitals	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1	1
Urgency Orders (subsequently certified)	—	—	—	1	1	1	1	—	—	—	2	—	—	—	—	4	4	8
Admitted to private mental hospitals (voluntary)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—
Provided with care other than under Lunacy and Mental Treatment Acts	1	—	8	3	10	12	5	11	10	8	12	7	18	28	11	29	75	98
Total number of cases not under Section 20	1	1	9	5	14	15	7	12	10	14	17	12	18	32	12	30	88	121
Total cases dealt with (A. and B.)	5	8	37	28	36	62	45	70	37	75	59	65	59	88	20	53	298	449
																	Admissions to Mental Hospitals:—	
																	57	152
																	61	87
																	2	10
																	120	249
																	Total	369

4. PREVENTION OF ILLNESS, CARE AND AFTER CARE

(i) TUBERCULOSIS

Dr. A. M. McFarlan

(Epidemiologist)

During 1956 there were 352 new cases of tuberculosis notified in Bristol. This total indicates the need to continue preventive measures and to intensify them wherever possible.

There are encouraging signs. (Table 8, page A17). The number of respiratory cases notified decreased for the fifth successive year, being 304 as compared with 348 in 1955 and 503 in 1951. The non-respiratory notifications totalled 48, similar to 46 in 1955 and 51 in 1951. The numbers of deaths again declined, those due to respiratory tuberculosis being 37 (52 in 1955 and 150 in 1951) and those due to non-respiratory tuberculosis being 6 (7 in 1955 and 14 in 1951). In addition the numbers of patients in hospitals have decreased so that although more than 150 beds have been transferred to other uses, there is now no waiting list for admission.

The continuing fall in the numbers of deaths and of patients in hospital shows the great improvement in the result of treatment which has followed the use of antibiotics and chemotherapy. Diagnosis of tuberculosis now leads in almost all cases to treatment which makes the patient not infectious (if indeed he or she has not been found before becoming infectious) and which allows a return to work with very little danger of relapse. There is every reason to persevere with present preventive measures for it is only their continued success which will lead to a real reduction in new cases. The methods can be considered in three categories: the search for unknown sources of infection, the protection of susceptibles, and the care of the patient and his family.

The Search for Sources of Infection

Routine investigation of the contacts of newly notified cases is arranged by the tuberculosis visitors and includes a chest X-ray of all adults and tuberculin tests of young adults and children living in the household or in frequent contact with the patient. As a rule the results are available within four weeks of notification when the tuberculosis visitors discuss their cases at a conference with the Chest Physician. When the findings suggest that there may have been contact with infection at work, arrangements are made with the Mass Radiography Service and employers to offer chest X-rays to employees. This work is essential and time-consuming, and it occasionally discovers an unknown infectious person.

Similar investigations have been carried out in families where a child has been found to be tuberculin-positive at the first school medical inspection or at a toddlers' clinic or day nursery. From 5,831 tuberculin tests in 1956, 84 children were found to be positive. Two of them proved to have tuberculosis and one adult case was discovered. The use of the Heaf test in this work in 1957 and more intensive investigation of families with a tuberculin-positive child may increase the number of cases found in this way.

The Mass Radiography Service took 55,575 miniature chest X-rays in Bristol during 1956, and found 118 cases of active tuberculosis (2.1 per 1,000) and 89 cases where observation was necessary (1.6 per 1,000). The value of this method of finding cases is clear. Particularly striking in the analysis of the M.M.R. Units' work in 1955 was the high yield of tuberculosis (10.1 per 1,000) in patients referred by doctors. The sessions for doctors' cases have continued in 1956 and have been well patronized. Most of the X-rays of adult contacts are taken by the M.M.R. Static Unit.

Mobile M.M.R. Units visit some of the larger firms and institutions in Bristol and from time to time hold open sessions for the public in different parts of the City. There are however large numbers of citizens who are not covered by these arrangements and plans are being made to find ways in which they can be reached.

The Protection of Susceptibles

Vaccination of susceptible contacts with B.C.G. continued during 1956 under the direction of Dr. A. T. M. Roberts as in the previous three and a half years. Of 964 contacts tested, 834 were found to be tuberculin-negative and were vaccinated. In addition 253 newborn infants were vaccinated. These figures bring the total number of contacts vaccinated since 1952 to 4,810.

Examination of 807 children who had been vaccinated in previous years showed that only 7 had reverted to tuberculin-negative. Six of these were successfully revaccinated; the seventh was not vaccinated again as there was now no infectious case in the family.

All vaccinated contacts are seen one year after vaccination, and thereafter they are seen at least once a year if there is an infectious case in the family.

B.C.G. vaccination for 13-year-old school children was accepted by parents for 3,782 children and 3,264 were found to be tuberculin-negative and vaccinated. The corresponding figures in 1955, the first complete year of the scheme, were 3,833 and 3,215. There was therefore a fall in the percentage of tuberculin-positive children from 16.1 in 1955 to 13.6 in 1956. More children therefore required the protection given by vaccination against tuberculosis during the years after leaving school when the incidence of disease is higher.

In addition to the specific immunity of vaccination, many measures are taken to improve the health of the community and they increase resistance to tuberculosis. The most important are improvements in housing and nutrition and in knowledge of the laws of healthy living.

The Care and After-Care of Patients and their Families

Mr. C. L. Bryant, the Executive Officer of the Tuberculosis Service, is also the Honorary Secretary of the Bristol Tuberculosis Voluntary Care Committee. This arrangement and the close co-operation of the Welfare Officers with other Corporation departments and national organisations serve to ensure that patients and their families receive all the assistance available to them.

During 1956 application forms were issued to 387 patients for allowances payable to certain cases of pulmonary tuberculosis by the National Assistance Board. Under the Council's scheme free milk,

usually two pints a day, was granted to an average of 381 patients a day on medical recommendation and subject to an income limit. Housing conditions in 162 families were such that support was given to an application for rehousing and 104 families were rehoused.

Other sources of help include the Ministry of Pensions and National Insurance for sickness benefit and disability pensions, the Bristol District Nursing Association for home nursing, the Council's Home Help Service for domestic help and the Children's Officer for boarding out children.

These sources do not supply all the needs discovered by Consultant Chest Physicians, tuberculosis visitors and welfare officers. During 1956 the Bristol Tuberculosis Voluntary Care Committee made 465 grants of clothing, bedding, or cash. The Committee also continued to hold occupational therapy classes and their occupational therapist made 750 home visits to patients who were unfit to attend the classes.

Most patients can return to normal employment after treatment. Those who cannot do so are registered with the Ministry of Labour under the *Disabled Persons (Employment) Act*. The Disablement Resettlement Officers of the Ministry then place them in work directly or after a time at the Ministry's Industrial Rehabilitation Unit at Fishponds and possibly at a Government Training Centre. The Special Remploy Factory at Southmead provided sheltered employment under medical supervision for an average of 47 men and women during 1956. Two male patients who went to Papworth in 1955 remained there during 1956 under the residential training scheme. The Voluntary Care Committee provided suitable employment for 12 ex-patients at kiosks for the sale of tobacco, stationery and confectionery in hospitals.

This summary indicates the variety of activities which are undertaken by the Council in co-operation with Hospital Services and other bodies so as to ensure proper care of the tuberculous patient from the day of diagnosis. This care takes its place as a preventive measure alongside the others which are applied to the members of his family and to the community at large. None of them can be relaxed since all contribute to the effort to eradicate tuberculosis.

(ii) VENEREAL DISEASES

Dr. A. E. W. McLachlan, Consultant Venereologist, has kindly contributed the following report. Since the inception of the National Health Service, an account of the medical aspects of venereal disease has not been included in the annual report of the Medical Officer of Health. The opportunity has therefore been taken to review the years 1948-1956.

A review of the work of the Venereal Diseases Department for the period 1948-1956 shows a continued downward trend in the total number of registrations, in the incidence of all stages of syphilis and of gonorrhoea. On the other hand non-specific urethritis in the male has shown a marked increase in incidence and in importance.

The details are shown in Tables 1 and 2.

Table 1—V.D. Statistics (Bristol Cases) 1948-1956

	Total New Registrations			Total Attendances
	Male	Female	Total	
1948	1,248	499	1,747	15,713
1949	1,102	479	1,581	12,523
1950	1,002	401	1,403	11,409
1951	851	274	1,125	9,940
1952	891	350	1,241	10,841
1953	867	344	1,211	10,894
1954	849	268	1,117	12,261
1955	864	262	1,126	11,023
1956	804	277	1,081	11,298

N.B.—Male cases include those attending Maudlin Street, Avonmouth, and Southmead clinics; female cases those attending Maudlin Street and Southmead.

Table 2—Classification of New Registrations (Bristol Cases) 1948-1956

	Syphilis			Gonorrhoea			Chancroid			Non Specific Urethritis			Other Conditions Registered		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1948	88	65	153	185	79	264	7	1	8	107	—	107	861	354	1,215
1949	92	50	142	157	42	199	10	—	10	114	—	114	729	387	1,116
1950	54	62	116	126	27	153	10	—	10	119	—	119	693	312	1,005
1951	50	31	81	123	38	161	12	—	12	140	—	140	526	205	731
1952	57	31	88	121	33	154	14	—	14	138	—	138	561	286	847
1953	33	29	62	112	41	153	12	—	12	152	—	152	558	274	832
1954	27	27	54	103	28	131	9	—	9	182	—	182	528	213	741
1955	21	20	41	120	38	158	10	—	10	201	—	201	512	204	716
1956	23	30	53	122	29	151	11	—	11	171	—	171	477	218	695

The decline in early syphilis reflects the efficiency of present-day treatment and the value of prompt tracing of possible sources of infection and subsequent contacts. Penicillin is the drug of choice, and has almost entirely replaced other forms of treatment. A course of 15—20 days (9—20 million units) is given according to the stage of the disease. The introduction of procaine-penicillin, which maintains an effective tissue level for twenty-four hours or more, has simplified out-patient treatment. Of the other antibiotics, terramycin in a dosage of 3·0 gm. daily for 14 days has been utilised in too small a number of cases to permit an accurate evaluation. With penicillin a single course of treatment gives a cure-rate, on a minimum of two years surveillance, of 95 per cent. The quantitative Wassermann reaction has proved of great value in assessing the immediate results of treatment.

In late syphilis, a preliminary course of bismuth and iodides is followed by penicillin. The cardio-vascular and nervous system cases present, apart from the medical problem of treatment, the often apparently insoluble social problem of finding employment suitable to their residual disability. Details of syphilis cases are given in Table 3.

Table 3—Syphilis: Analysis of New Registrations (Bristol Cases) 1948-1956

	Early			Late			Congenital (under 1 year)			Congenital (over 1 year)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1948	54	43	97	32	14	46	—	—	—	2	8	10
1949	48	17	65	39	23	62	1	1	2	4	9	13
1950	17	10	27	31	42	72	2	2	4	4	8	12
1951	17	4	21	26	21	47	2	—	2	5	6	11
1952	18	5	23	36	20	56	—	—	—	3	6	9
1953	12	2	14	16	19	35	—	—	—	5	8	13
1954	6	1	7	18	16	34	—	—	—	3	10	13
1955	6	2	8	12	14	26	—	—	—	3	4	7
1956	7	6	13	16	18	34	—	—	—	—	6	6

In syphilis in pregnancy, penicillin has proved most effective in preventing infection of the infant. The incidence of maternal infections in patients referred to the Special Diagnostic Clinic is shown in Table 4.

Table 4

Year	New Registrations	Syphilis					Gonorrhoea	Attendances
		Early	Late	Late Congenital	Previously treated	Total		
1948	353	5	1	2	5	13	1	1,417
1949	354	2	2	1	5	10	1	1,785
1950	379	1	5	3	4	13	1	1,281
1951	359	1	2	3	—	6	1	1,204
1952	284	—	3	1	2	6	3	984
1953	225	1	1	2	1	5	3	768
1954	242	—	2	—	1	3	1	851
1955	207	—	2	2	1	5	1	691
1956	226	—	2	1	—	3	1	433

The recognition that biological false positive serum reactions can occur in pregnancy—and in other conditions—makes confirmation of the diagnosis of syphilis difficult in patients with no history or clinical signs of infection. In the evaluation of such cases, the T. pallidum immobilisation test, carried out at the Ministry of Health Reference Laboratory has been of inestimable help in excluding syphilis. It is hoped that local facilities for this test will soon be available.

In the treatment of chancroid, the sulphonamides, streptomycin, terramycin, and aureomycin have all been successfully employed. In gonorrhoea penicillin is still the drug of choice, and so far there is fortunately no evidence of drug-resistant strains.

Non-specific urethritis in the male falls into two groups—one bacterial in causation, reacting promptly to the appropriate antibiotic, and the other abacterial and often intractable. Various schemes of treatment, a five day course of streptomycin, a streptomycin injection followed by sulphonamides for five days, aureomycin, terramycin, etc., over periods of 5—7 days have all proved successful in a percentage of cases. But in about twenty per cent. of cases recourse is necessary to the older forms of local treatment. This type of non-specific infection is little recognised in women, and usually causes only the mildest of symptoms. Yet treatment, on epidemiological grounds, in cases of repeated infection of the male, has prevented recurrences.

In the category of abacterial urethritis is Reiter's disease—non-specific urethritis, conjunctivitis or iritis, arthritis and keratoderma. While this disease is normally mild and self limiting, more serious forms occur, one of which terminated fatally in the period under review. The most effective treatment to date has been a heavy course of streptomycin and pyretotherapy by intravenous injections of T.A.B. vaccine.

The large number of other registrations comprises a miscellany of conditions, many being the result of sexual exposure. In the male, balano-posthitis, non-specific pyogenic or chemical ulcerations, and paraphimosis are the most important. In the female trichomonal and non-specific vaginitis, cervical erosions without other signs, and vulvo-vaginal thrush are the most common.

In both sexes genital manifestations of skin diseases, e.g., warts, herpes progenitalis, scabies, and pediculosis, exposure and fear of infection, previous incompletely treated infections, examination of familial and other contacts of patients suffering from syphilis or gonorrhoea, and pre-marital tests form the most important section. Prophylaxis is now seldom requested.

Venereal Disease Medico-Social Work

The following report has been contributed by Miss G. Stinchcombe, Medico-Social Worker:—

During the early months of 1956 the social problems and challenges presented by venereal disease were tackled with renewed enthusiasm. The changing pattern of employment was found to be leading to difficulties in regular attendance and an increased proneness to default. Much effort has also been required to reconcile estranged families; to find opportunities for the social rehabilitation of maladjusted patients; to assist patients in securing suitable employment; and to help them to regain an interest in life. Endeavours to educate those unable to understand the implications of venereal disease, the necessity for adequate tests, treatment, and surveillance, form an essential part of this work.

The death in May 1956 of Mr. V. G. Deller, Male Social Worker, was a great loss both to staff and patients and the many tributes paid to him demonstrated beyond doubt, not only the warm regard in which he was held, but also the genuine appreciation of his personal interest in the human problems met with in the clinics.

For the remaining seven months of the year every effort was made to maintain the efficiency of the department and the pattern of the welfare work continued as before with the primary emphasis on contact tracing, default control, and rehabilitation. This period has given me, personally, an exceptionally wide opportunity to ascertain the reaction of male patients to a female medico-social worker. No difficulties were met with—confirming the view previously expressed, that an adequately trained social worker can deal equally well with both sexes.

Mention was made last year of the increasing influx into the City of coloured people. This has given rise to many problems of housing, employment, etc. Their simple attitude towards life makes health and social education measures a slow and somewhat disheartening process, until their full confidence and trust is obtained. The cordial liaison existing between the clinics and the various statutory and voluntary bodies has been a great factor in helping to guide and advise them.

Lectures and talks to various professional and other bodies have been continued on a rather wider scale than usual, and, through the generosity of the V.D. Voluntary Care Committee, financial assistance has been given in necessitous cases.

The following figures are a statistical summary of the year's work:

**Statistical Record of Social Work
for the year ended 31st December, 1956**

	Male		Female	
	Bristol	Other Areas	Bristol	Other Areas
Total number of registrations during 1956 ..	928	339	285	80
New cases persuaded by the social workers to attend clinic for medical examination in view of possible risk of infection	49	6	69	7
New cases who attended through other agencies	879	333	216	73
Number of cases on social workers' register between 1st January and 31st December, 1956	589	339	285	80
Social workers' attendances at clinic	278	—	397	—
Number of new cases interviewed in the clinic	180	91	214	42
Current cases interviews	195	97	662	214
In-patient interviews	98	124	103	144
Contact tracing visits	95	—	175	—
Visits to defaulters	309	—	358	—
Consultations with voluntary bodies	240	—	559	—
Total number of visits including those for other purposes	689	—	1,208	—

5. THE AMBULANCE SERVICE

R. F. F. Wood
(*Chief Ambulance Officer*)

There are two features which tend to dominate a review of ambulance service working throughout the past year. One, the acute disappointment felt by all intimately connected with the Ambulance Service over the Ministry of Health's decision which precluded the Corporation from proceeding with the erection of a central ambulance station on a site in Avon Street. Hopes were very much centred around this project which undoubtedly would have increased the efficiency and economy of the service and enabled personnel and vehicles to be housed in a manner befitting a city the size and stature of Bristol. Secondly, and just as important in its own way, is the series of talks initiated by the Medical Officer of Health, and embracing the Medical Officers of the adjoining counties of Somerset and Gloucestershire and representatives of the main hospital groups in the City. The spirit in which these discussions took place augurs well for the future. One direct result was an excellent joint survey of out-patients' transport which was conducted by officers of the Ambulance Service and the teaching hospital group. Certain recommendations made in the report have already been put into effect and it is hoped they will assist the Ambulance Service by avoiding wasteful and unnecessary journeying across the City.

One point raised in the discussions has still to be resolved. It is the provision at the main hospitals of a well appointed and adequately staffed reception centre to which all patients could be brought on admission to or

discharge from hospital, or whilst awaiting transport for return after treatment. This, as far as the Ambulance Service is concerned, would result in the saving of an enormous amount of time spent in warding patients and collecting them from various departments scattered over the hospital premises.

Despite the difficulties with which the service has had to contend during the year it has still been found possible to carry an increased number of patients and at the same time to effect a reduction in the number of miles run. The figures accompanying this report show 153,228 patients carried involving a total of 801,556 miles. In comparison with the figures for 1955 there has been an increase of 1,785 in the number of patients carried but the mileage figure has been reduced by a total of 17,740 miles. It has also been found possible to reduce still further the miles-per-patient figure—this time from 5·41 in 1955 to 5·23 in 1956 (a saving of 0·18 miles per patient). There has also been an increase in the number of occasions on which rail transport was used. This method of transport was used on 144 occasions as against 96 in 1955, and the staff of the British Railways are to be congratulated on the manner in which they dealt with all such requests. For the majority of patients sent by rail it has been necessary to provide an escort. The assistance of the voluntary organisations of the British Red Cross Society and St. John has been sought in these cases and their help throughout the year has been much appreciated. Although the number of cases passed to the Women's Voluntary Services (Hospital Car Service) has decreased considerably there has always been a ready response to all such requests.

The demand of the service precluded any real effort at Civil Defence training for members of the peace-time service. The training programme for each of the six divisions of volunteers for the Civil Defence Ambulance and Casualty Collecting Section has however continued on a full scale and details of activities in this direction will be found in the report on Civil Defence.

The number of patients requiring transport to places outside the City boundary is not always fully appreciated. In order to achieve the best results in this field and at the same time to conserve the use of vehicles, it is essential that full co-operation is maintained between all ambulance authorities in the Region—especially with the neighbouring authorities of Somerset and Gloucestershire. Liaison on this basis has resulted in considerable use of vehicles belonging to these authorities to convey patients governed by Section 24 of the Amendment Act. Valuable assistance has been given by the adjoining counties in conveying, on many occasions, patients coming within the normal scope of Section 27 of the National Health Service Act.

In November, ambulance premises rented from the City and Marine Ambulance Corps since 1952 were vacated and personnel and vehicles moved to other premises in Ellbroad Street. The move is only a temporary measure, but the construction of minor accommodation works has ensured that the station is as well appointed as possible in the existing circumstances.

Throughout the year it has been proved that given encouragement and fortified by the goodwill of those who use the service, the Bristol Ambulance Service can and will do much to enhance still further the expectation that in all its undertakings everything will be shipshape and Bristol fashion.

Summary of all Cases conveyed by the Service

Amb. Service Vehicles	Taxi Association	Hospital Car Service	Total	Rail Journey
152,386	536	306	153,228	144

These figures show an increase of 1,785 patients carried over the figure for 1955.

It also indicates an increase of 48 patients using rail transport.

Classification of Cases Conveyed by Vehicles of the Ambulance Service only

Accidents	Maternity	Infectious	General	Total
6,788	3,486	1,123	140,989	152,386

These figures represent an increase of 3,666 patients compared with a total of 148,720 for the previous year.

Mileage

Bristol Ambulance Service Vehicles	Supplementary Services		Grand Total
	Taxi Association	Hospital Car Service	
792,405	4,212	4,939	801,556

These figures show that despite an increase of 1,785 patients carried, the mileage has been reduced by 17,740 miles when compared with the figures for the previous year.

Miles per patient figure — 5.23

This shows a reduction of 0.18 miles per patient when compared with 5.41 miles per patient for 1955.

I. SANITARY CIRCUMSTANCES, HOUSING AND INSPECTION OF FOOD

F. J. Redstone, F.R.S.H., F.A.P.H.I.
(Chief Public Health Inspector)

<i>Deputy Chief Public Health Inspector</i>	G. J. Creech
<i>Senior Housing Inspector</i>	C. E. Bowden
<i>Senior Food Inspector</i>	P. Hayter
<i>Senior Port Health Inspector</i> ..	E. I. Davies
<i>Senior Meat Inspector</i>	A. L. Mawditt
<i>Senior District Inspector (Special duty: Atmospheric Pollution)</i> ..	G. Hopper
<i>Senior District Inspector (Special duty: Technical Training and Environmental Health Education)</i> ..	G. L. Whone

(i) ENVIRONMENTAL HEALTH SERVICES

The scope of the environmental health services includes a wide field of public health responsibilities arising from housing conditions, food transport and handling, water supplies, rodent and pest control, offensive trade premises, factories and shops, meat and milk inspection, port health, atmospheric pollution and many allied subjects.

The national shortage of public health inspectors continued but Bristol held its own in this respect; indeed, by constant advertising and the offer of facilities for meat and other foods and smoke inspection qualifications it is pleasing to record that the number of vacancies in an establishment of 51 was reduced from 18 to 10 during the year.

The six trainee public health inspectors appointed by the Health Committee worked well both in their studies and in the work of the Health Department by assisting with housing survey details, meat inspection records, and other miscellaneous matters which did not demand the attention of qualified public health inspectors.

Further new legislation affecting the work of the Health Department came into force during the year and it is gratifying to report that after much discussion and amendment the Clean Air Act, 1956, was finally passed and certain sections became operable from the last day of 1956. The powers now given to local authorities to cleanse the air of our towns and cities of much unnecessary pollution is valuable, but it is recognised that progress towards the desired results will inevitably be gradual. With this in mind the Health Committee and its officers commenced a study of the new powers with a view to their appropriate implementation.

The Chief Public Health Inspector and his staff addressed many meetings of the building and food trades associations and various other discussion groups throughout the City. It can be said that in this way and with the help of the Bristol press, a better understanding of the Health Department's work is being created. The direct result of this is that the public health officer is now accepted by both owners and occupiers as a friend and adviser in dealing with the many problems which arise from day to day. It has been stated elsewhere that the triumphs of environmental health work are to be found in the battles that are never fought and in the epidemics that never break out. Its victories are less spectacular than those of curative medicine but are none the less real. This knowledge is a great encouragement to all concerned with the maintenance and improvement of public health.

General Notes

During the year 3,983 complaints were received, the number being approximately the same as for the preceding year. In dealing with these matters and in carrying out their statutory duties the general inspectorial staff paid 8,067 first visits and 23,066 revisits. The figures of visits made by the general inspectorate remained fairly constant, but the visits by housing inspectors in connection with their specialised duties show a great increase. During the year the number of housing inspectors was increased from three to six, and this naturally was reflected in the increased output. During 1956, the housing inspectors paid 9,840 visits in connection with housing surveys, housing improvement grants and information for the Town Clerk in connection with the life of properties. It is interesting to note that in this one aspect of the work alone, the Town Clerk referred to the Department 1,348 enquiries regarding the future of properties in this City. It will be noted from the figures shown elsewhere in this report that the food inspectors and the meat inspectors paid between them a total of 3,627 visits, and it will be seen, therefore, that during the year the total visits made by the Department was 44,600. It is felt that this is a good result, obtained by a staff which is still well below its maximum.

The Department continued to secure very satisfactory results by informal approach to property owners, but during the year it became necessary to serve 835 informal and 968 statutory notices. This shows a steady increase over the figures of 1955. Satisfactory compliance was secured in 747 cases, but during the year it became necessary to ask the Town Clerk to institute legal proceedings in 60 cases where property owners had made default upon notices served upon them. In these 60 cases, the Town Clerk withdrew 19 because the owners had complied with the necessary requirements before the cases were heard in the Magistrates' Court. Of the remaining 41 cases, the Magistrates made Nuisance Orders in 31 cases, they adjourned 9 cases, and dismissed one. Of the 31 cases where Nuisance Orders were secured 23 were dealt with by default procedure, and details of the action taken appear in another section of this report.

Examination Successes during the Year by Officers of the Division

The following further qualifications were obtained by officers of the Division during the year:—

The Royal Society for the Promotion of Health: Certificate for Smoke Inspector: N. C. Alley.

The Royal Society for the Promotion of Health: Certificate for Inspector of Meat and Other Foods: D. M. Hughes.

Royal Sanitary Institute and Sanitary Inspectors' Examination Joint Board: G. A. Manners; B. A. Mills.

Local Government Examination Board: Clerical Division Examination: M. K. R. Gerrish.

National Certificate in Building (Ordinary Level): D. J. Barnett; M. D. Benwell; F. J. Webb.

Repairs to Property in Owner's Default

At the beginning of the year under review 15 outstanding cases were being dealt with by the Section.

During 1956, 52 cases were referred to the Defaults Section for consideration, making a total of 67 properties. Twenty-nine of these properties were repaired by the Corporation's contractors; 6 were repaired by their respective owners after the cases had been referred to the Defaults Section and 3 cases were not proceeded with for various reasons.

At the end of 1956, 29 cases were still outstanding; of these, 20 properties were being repaired by the Corporation's contractors; and 9 cases were pending.

During the year, 38 orders were issued to various Corporation's contractors and accounts totalling £1,028 0s. 11d. were passed.

This year saw a slight increase in the number of cases referred to the Defaults Section for consideration.

Works by Agreement under Section 275 of the Public Health Act, 1956

At the beginning of the year no cases of "Works by Agreement" were in the hands of the Defaults Section.

During 1956, 4 cases were referred to the Defaults Section for consideration; of these, 3 properties were repaired by the Corporation's contractors, and 1 case awaiting action.

During the year, 3 orders were issued and accounts totalling £244 0s. 9d. were passed.

An increase in default work has been maintained. The number of "Works by Agreement" (Sec. 275) has remained at the yearly average, with the exception of 1955, when no cases were considered.

Public Health Inspections—Sanitation, Housing, Shops Acts, etc.

1955				1956		
Visits	Re-visits	Total		Visits	Re-visits	Total
		3937	Complaints			3,983
			<i>Visits:—</i>			
4,016	18,909	22,925	Dwelling houses	4,833	17,152	21,985
2	2	4	Houses let in lodgings	2	8	10
4	7	11	Common lodging houses	4	7	11
85	242	327	Food shops—Registerable	98	149	247
510	1,343	1,853	Not registerable	660	1,416	2,076
232	535	767	Other shops	223	517	740
35	97	132	Bakehouses	52	66	118
82	216	298	Workplaces and offices	118	251	369
47	72	119	Factories—Non-mechanical	41	131	172
223	811	1,034	Mechanical	336	532	868
20	6	26	Outworkers	99	49	148
11	30	41	Removal of aged persons	20	38	58
103	708	811	Smoke observations	134	893	1,027
16	12	28	Offensive trades	16	28	44
23	221	244	Entertainment places	29	149	178
33	238	271	Tents, vans and sheds	46	259	305
47	124	171	Keeping of animals	67	97	164
441	192	633	Food inspection	374	266	640
288	774	1,062	All other matters	509	633	1,142
255	324	579	Sites	348	279	627
62	203	265	Institutions, hospitals, etc... .. .	58	146	204

1955					1956			
In- tima- tion	Statu- tory	Compliance			In- tima- tion	Statu- tory	Compliance	
		I.	S.				I.	S.
544	876	395	306	<i>Notices:—</i>				
—	—	—	—	Dwelling houses (P.H.)	696	968	331	308
—	—	—	—	Houses let in lodgings	—	—	—	—
15	—	—	1	Common lodging houses	—	—	—	—
117	4	72	6	Foodshops—Registerable	4	—	1	—
27	4	26	2	Non-registerable	77	—	44	2
1	—	—	—	Other shops	26	—	22	—
3	—	1	—	Bakehouses	2	—	1	—
4	—	1	—	Workplaces and offices	5	—	5	—
32	—	12	1	Factories—Non-mechanical	6	—	6	2
—	—	—	—	Mechanical	19	—	22	1
—	—	—	—	Outworkers	—	—	—	—
—	—	—	—	Removal of aged persons	—	—	—	—
—	1	—	—	Smoke observations	—	—	—	—
—	—	—	—	Offensive trades	—	—	—	—
4	—	—	—	Entertainment places	—	—	2	—
—	—	—	—	Tents, vans and sheds	—	—	—	—
—	—	—	—	Keeping of animals.. ..	—	—	—	—
1	—	2	—	All other matters	—	—	—	—

Sanitation, Housing, Shops Acts, etc.—Remedial Action

1955		1956
	<i>Drainage Works:—</i>	
55	New drains laid	29
596	Drains repaired	579
921	Choked drains cleared	1,130
28	Tests made	177
	<i>Sanitary Conveniences:—</i>	
10	Flushing appliances introduced	12
2	Additional closets fitted	8
4	Separate closets for sexes provided	7
52	New pans fitted	81
6	Action re bathroom and geyser vent	1
11	Urinals fitted	5
193	Other works	196
29	Intervening vent space provided	18
6	Cesspools abolished	—
	<i>Water Supplies:—</i>	
11	New and additional installations	8
61	Hot water installed	20
—	Wells closed	1
	<i>Other Sanitary Fittings:—</i>	
26	New sinks fitted	20
1	Additional sinks provided	5
13	Wash basins provided	21
	<i>Other Works:—</i>	
447	Roofs repaired	401
325	Dampness remedied	283
1,703	Other new and repair works	1,245
6	Yards paved and drained	4
27	Houses cleansed— Dirty	18
178	Verminous	89
—	Food store installed—cooking facilities improved	20
32	Lighting improved	33
14	Ventilation improved	10
—	Meal rooms provided	3
8	Heating provided	1
—	Exhumations	14
6	Overcrowding—abated	2
	<i>Keeping of Animals:—</i>	
1	Removal of manure	—
—	Provision of manure receptacles	—
—	Drainage provided	—
	<i>Aged and Infirm Persons:—</i>	
5	Removals—Voluntary	3
	Court Order	1
	<i>Smoke Observations:—</i>	
12	Infringements—Found	14
12	Remedied	14
	<i>Noise, Nuisances:—</i>	
7	Found	3
7	Abated	3
	<i>Other Nuisances:—</i>	
422	Found	606
422	Abated	606
	<i>Food Hygiene Regs. 1955:—</i>	
—	Miscellaneous requirements	59

(ii) FACTORIES ACTS, 1937 AND 1948

Inspection of Factories

Premises (1)	Number on Register (3)	Number of		
		Inspection (4)	Written Notices (5)	Occupiers prose- cuted (6)
(i) Factories in which sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	152	172	6	—
(ii) Factories not included in (i) in which Section 7 is enforced by the local authority	1,078	868	19	—
(iii) Other premises in which Section 7 is enforced by the Local Authority (excluding outworkers' premises) ..	103	369	5	—
Total	1,333	1,409	30	—

Cases in which Defects were found

Particulars (1)	No. of cases in which defects were:—				No. of cases in which prosecutions were instituted (7)
	Found (3)	Remedied (4)	Referred to H.M. Inspector (5)	Found by H.M. Inspector (6)	
Want of cleanliness (S.1)	7	7	1	—	—
Overcrowding (S.2)	—	—	—	—	—
Unreasonable temperature (S.3) ..	—	—	—	—	—
Inadequate ventilation (S.4)	10	10	—	2	—
Ineffective drainage of floors (S.6)	—	—	—	—	—
Sanitary conveniences (S.7):					
(a) Insufficient	7	7	—	3	—
(b) Unsuitable or defective ..	24	24	—	—	—
(c) Not separate for sexes ..	—	—	—	—	—
Other offences against the Act (not including offences relating to Outwork)	—	—	—	—	—
Other Works	15	15	—	—	—
Total	63	63	1	5	—

List of Outworkers received during 1956

Description of Homework	No. of Outworkers	
	February	August
Wearing apparel	62	51
Shoes	6	—
Artificial jewellery	33	2
Gloves	10	9
Others	17	18
Total	128	80

(iii) HOUSING

Housing, Repairs and Rents Act, 1954, Section I

In the 1955 annual report reference was made to the proposals submitted to the Minister under Section 1 of the *Housing, Repairs and Rents Act, 1954*. Broadly, these proposals were to demolish 10,000 houses in 10 years; 5,000 of them to be acquired in the early years of the programme and repaired to a standard sufficient for the time being.

During 1956 the Housing Committee gave further consideration to this matter and adopted a programme of demolishing the 10,000 houses in five years, by so doing abandoning their intention to acquire and temporarily repair, whilst at the same time increasing the number of council dwellings set aside for rehousing families displaced from unfit properties from 1,000 to 2,000 a year.

Clearance Area Procedure

Clearance areas represented 107

Number of houses involved 1,215

Number of Orders made:—

(a) Clearance Order 17 (75 houses)

(b) Compulsory Purchase Orders 26 (378 houses)

Comparative figures are given in the following table.

Year	Clearance Areas		Orders made							Orders Confirmed						
	Rep.	Houses	C.O.	Pinks	C.P.O.	Pinks	Grey	Others	Sites	C.O.	Pinks	C.P.O.	Pinks	Grey	Others	Sites
1953	2	33	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1954	22	112	11	76	4	17	5	—	1	3	45	1	5	—	—	—
1955	48	537	15	118	13	250	135	11	50	14	57	6	30	12	—	5
1956	107	1,215	17	75	26	378	63	11	75	16	107	20	314	93	10	44

A total of 1,462 unfit houses were dealt with during 1956, made up as follows:—

1. Housing Act, 1936—Section 25—representations 1,215
2. Housing Act, 1936—Section 11—representations 93
3. Housing Subsidies Act, 1956—
Certificates of Unfitness issued 51
4. Housing Subsidies Act, 1956—
Undertakings to demolish 6
5. Other demolitions by Local Authority and
voluntarily by private individuals 97

Re-housing and the Aged

It is natural in planning a programme of housing surveys that we look first at the older houses for it is within those areas that the greatest number of unfit houses are to be found. It is understandable also that in these older houses we find a relatively high proportion of old people, for whom the process of re-housing creates many social and financial problems.

For a very long time inspectors in the field have been conscious of a growing reluctance on the part of the older folk to move.

How big is this problem likely to become for the Local Authority?

To try and answer this question and to represent it statistically a pilot survey of 185 unfit houses comprising a typical slum clearance area was carried out by Dr. Reilly with the following results :—

<i>The Unfit houses</i>				<i>% of houses</i>	
Unoccupied	20			11	
Single occupation . .	143			77	
Multiple occupation . .	22			12	
Total houses	185			100	

<i>Family units per house</i>				<i>% of houses</i>	
One unit per house . .	143			87	
Two units per house . .	15			9	
Three units per house . .	5			3	
Four units per house . .	2			1	
Total occupied	165			100	

<i>Persons per unit</i>				<i>% of units</i>	
Units of one person . .	43			22	
„ „ two persons	58			30	
„ „ three „	43			22	
„ „ four „	30			15	
„ „ five „	15			7.5	
„ „ six „	3			1.5	
„ „ seven „	3			1.5	
„ „ eight „	1			0.5	
Total units	196			100	

<i>The inhabitants of the unfit houses</i>				<i>% of population</i>	
Children under school-leaving age	130			23.4	
Old age pensioners . .	103			18.6	
Other adults	306			58	
Total population	539			100	

<i>Old age pensioners</i>				<i>% of O.A.P's</i>	
Living alone	29	..	..	28	
Living together as married couples	34	..	..	32	
Living with relatives ..	40	..	..	40	
Total	103	..	..	100	

				<i>% of all units</i>	
Old age pensioners' units ..	46	..	..	24	
Other units	150	..	..	76	
Total	196	..	..	100	

Ground floor accommodation

O.A.P's needing G.F. accommodation	35		
Others needing G.F. accommodation	3		
Total	38		

i.e. 20% of all units

Children

				<i>% of all units</i>	
Units with no children ..	125	..	..	63	
„ „ one child ..	29	..	..	15	
„ „ two children ..	28	..	..	14	
„ „ three children ..	9	..	..	5.5	
„ „ four children ..	2	..	..	1	
„ „ five children ..	2	..	..	1	
„ „ six children ..	1	..	..	0.5	
Total	196	..	..	100	

Years lived in area

				<i>% of all units</i>	
Less than 5 years in area ..	29	..	..	14	
5 to 10 years in area ..	19	..	..	10	
10 to 20 years in area ..	49	..	..	24	
Over 20 years in area ..	99	..	..	52	
Total	196	..	..	100	

Attitude of the people

				<i>% of units</i>	
Eager for demolition of houses	120	..	..	61	
Indifferent to demolition ..	25	..	..	12	
Opposed to demolition ..	51	..	..	27	
Total	196	..	..	100	

<i>On waiting list for a council house</i>				<i>% of units</i>	
On waiting list	48	..	..	24	
Not on waiting list	148	..	..	76	
Total	196	..	..	100	

<i>Outlying estates</i>				<i>% of units</i>	
In favour of move to out-lying estates	41	..	..	20	
Indifferent	36	..	..	30	
Opposed to moving	119	..	..	62	
Total	196	..	..	100	

<i>Old age pensioners and outlying estates</i>				<i>%</i>	
O.A.P's in favour of move outside	2	..	..	4	
O.A.P's indifferent	5	..	..	11	
O.A.P's opposed to move outside	39	..	..	85	
Total	46	..	..	100	

Rents

Rents vary from 4/6 per week to £2 5s. 0d. per week.
The average is 12/6 and the commonest is 11/-.

Summary

The most common worries expressed are:—

- (1) Fear of having to leave their accustomed environment and an aversion to living on outlying council estates.
- (2) Difficulty of getting to and from work.
- (3) The possibility that many of the women will be unable to keep their part-time or full-time jobs in the City.
- (4) Fear of financial loss due to increased rents and costs of travelling.
- (5) Fear of being separated from relatives who live nearby.

Old age pensioners living alone or in couples constitute 24 per cent of all units; 20 per cent of all units need ground floor accommodation on medical grounds; 62 per cent of all units and 85 per cent of old age pensioners are opposed to moving to outlying districts.

Housing Subsidies Act, 1956

As a result of the passing of the above Act, subsidies can only be claimed for dwellings provided by the Local Authority to accommodate families displaced by slum clearance; and slum clearance includes the demolition of unfit houses owned by the Corporation provided the Medical Officer of Health issues a certificate of unfitness.

During 1956, Housing Inspectors had to be diverted to some extent from their normal clearance area duties to survey properties purchased by the Corporation for demolition under Part V *Housing Act, 1936*, and under the Town and Country Planning Acts, and 51 certificates of unfitness were issued.

Some doubt exists whether a subsidy can be claimed where the rehousing of a family takes place before the confirmation of an order. It not infrequently happens that a house is included in a representation for a clearance area, but before the Order is made or confirmed, circumstances arise, e.g. health or danger, which renders it necessary for the occupant to be rehoused. In an endeavour to safeguard the Corporation's right to claim the subsidy it has been arranged that the Housing Manager will only rehouse such families on receipt of a certificate from the Medical Officer of Health stating that a danger to health exists, and it is anticipated that the Ministry will accept this certificate for subsidy purposes. Twelve such certificates were issued.

The Housing Subsidies Act also permits subsidies to be claimed for rehousing where an owner gives an undertaking to demolish an unfit house. This new procedure has proved very helpful in selected cases and particularly where danger is involved. During the year six such undertakings to demolish were accepted by the Housing Committee.

Housing Act 1936—Section 157. Power of Entry

During the year difficulties have arisen in gaining admittance to occupied houses where the occupier and/or owner resists every approach, both informal and formal.

Assuming that the necessary statutory formalities have been followed in the service of notices of intention to survey and examine under Section 157, the only avenue open to the Local Authority lies in Section 158 for obstruction, with a fine as the penalty. In so far as the penalty is not a continuing one the process of serving notices of intention to inspect and subsequent complaint to the Courts could go on for ever.

The sanction of a financial penalty may have been sufficient in 1936 to "persuade" an occupier or owner to permit the examination to take place. There is reason to doubt this today. It seems strangely inconsistent for Section 5 of the *Housing Act, 1936*, to have placed upon local authorities the duty to inspect their districts and deny them the ultimate power of doing so.

No one would condone the use of the much stronger power of entry under the *Public Health Act, 1936*, knowing that the information obtained by the resulting examination was to be used for the purposes of the *Housing Act, 1936*.

The time is long overdue for the repeal of Sections 157 and 158 and their substitution with a real power of entry, for the failure to examine one house can hold up a representation involving hundreds of houses.

Housing, Repairs and Rents Act, 1954

Part II—Certificates of disrepair

The 1955 annual report drew particular attention to the downward trend respecting applications for certificates of disrepair. During 1956 only 18 applications were received, from which it may reasonably be inferred that owners have practically ceased their efforts to increase rents following repairs under the provisions of the *Housing, Repairs and Rents Act, 1954*.

Housing and Sanitation

1955		1956
	<i>Houses Inspected:—</i>	
—	Section 9	—
140	Sections 11 and 12	119
537	Clearance Area	1,530
3,663	Visits for improvement grants, estimated life and other matters	9,840
	<i>Represented to Committee:—</i>	
—	Section 9	—
140	Sections 11 and 12	119
537	Clearance area	1,215
	<i>Orders made:—</i>	
44	Demolition Order—(Section 11, <i>Housing Act, 1936</i>) ..	32
57	Closing Orders—Whole house (Section 10, <i>Local Government (Miscellaneous Provisions) Act, 1953</i>) ..	52
3	Closing Orders—Whole house (Section 3, <i>Housing Act, 1949</i>) ..	2
29	Closing Order—Underground rooms and parts of buildings (Section 12, <i>Housing Act, 1936</i>)	24
1	Undertakings to repair accepted (Section 11, <i>Housing Act, 1936</i>)	3
15	Undertakings not to use (Section 11, <i>Housing Act, 1936</i>) ..	10
—	Demolition Order revoked and Closing Orders substituted (Section 11, <i>Local Government (Miscellaneous Provisions) Act, 1953</i>)	—
	<i>Houses repaired:—</i>	
—	Section 9—informal	—
—	Section 9—formal	—
—	Section 9—formal by Corporation in default	—
2	Undertakings to repair	2
5	Undertakings not to use, cancelled after repair	2
5	Other repairs	—
6	Closing Orders determined after repair	14
—	Rent Certificates issued	—
16	Certificates of Disrepair	18
3	Revocation of Certificates of Disrepair	4
1	Refusal of Certificates of Disrepair	—

Moveable Dwellings

As in previous years, a careful watch has been kept on the use of moveable dwellings within the City. Each application, whether for a site licence or an individual moveable dwelling application, was carefully investigated by the Chief Public Health Inspector's staff and close liaison was maintained with the City Planning Officer's Department.

During the year, two applications for site licences were made, both of which were refused. One in particular referred to a 1½ acre site for 15 caravans. In this case investigation showed that the site was unsuitable for such development, the Chief Public Health Inspector submitting that the varying levels of the site would require multiple collecting points for sullage water soakaways and a dilapidated and dangerous ruin on the site, having exposed cellar areas, would interfere with the lay-out of the caravans and could become a dumping-ground for refuse. The level of the cellar area, too, would probably result in waste water drainage being received into it from the proposed soakage pits. Amongst other conditions considered detrimental was the profusion of trees under which caravans would be sited and which could result in dampness and fly nuisance, and the fact that the proposed site adjoined a registered nursery and a Local Authority housing site.

Realising that caravans represent a "high fire risk", the opinion of the Fire Service of the City was sought in this case and the fire precaution recommendations of the Fire Prevention Officer were included in the report presented by the Chief Public Health Inspector to the Health Committee.

The policy of using every avenue of assistance is considered of vital importance in order to ensure that unsuitable caravan development may be prevented.

In addition to the applications for the two site licences mentioned above, 17 individual licences for moveable dwellings were received, including a block of six caravans for a Corporation building site, and a block of three caravans required for contractors engaged on a G.P.O. telephone contract. All these applications were considered and licences granted.

(iv) INSPECTION OF MEAT AND OTHER FOODS

Slaughtering Facilities

During the year a White Paper was issued on slaughterhouse policy indicating that there would be a larger number of slaughterhouses throughout the country than was envisaged in the 1955 Report of the Inter-departmental Committee. Minimum standards are to be prescribed for slaughterhouses and Local Authorities will in due course be required to prepare and submit reports to the appropriate Ministry on the slaughtering facilities available in the various areas.

This policy statement suggested that Local Authorities should have discussions with representatives in neighbouring areas on the level of facilities available or to be provided. The Bristol Health Committee agreed that such meetings should be held early in 1957 and that trade interests should be represented in these preliminary discussions.

During the summer two outbreaks of foot and mouth disease in the Bristol area brought the movement of cattle, except under licence, to an end for a period of nearly two months. Instead of reducing the throughput of the Abattoir, however, as might have been expected, it had the reverse effect and considerably greater numbers of animals arrived for slaughter. The reason for this was the closure of private slaughterhouses on the outskirts of the City. During the period of the outbreak the Abattoir was a cleansing centre for cattle lorries and a total of 265 lorries were cleansed and disinfected as required by the regulations.

Meat Inspection

Although the total kill increased, whole carcasses of meat condemned as unfit for human consumption showed a slight decrease over last year's figures. This is due to a decrease in the number of cows killed with a corresponding increase in the better class of beef animal. This is again shown in the percentage of animals killed which were found to be affected by tuberculosis. In the case of cow carcasses the drop is 1.6 per cent and in steers and heifers 0.82 per cent. We may now be seeing some evidence of the field work put in by the Ministry of Agriculture, Fisheries and Food in the reduction of disease among dairy and other cattle herds in this country.

Meat inspectors were on continuous duty at the Public Abattoir and Hotwells Lairs during the whole period of slaughter and 100 per cent meat inspection of all food carcasses and offal was maintained.

A certain amount of Sunday slaughtering has again taken place. It is felt by many of those concerned that this practice could, with adequate facilities and planning, be eliminated, and we may one day see legislation introduced which will prohibit the Sunday slaughter of food animals.

The detection and cold storage of beef carcasses affected by *cysticercosis* shows an increase of 24 carcasses. (51 carcasses this year and 27 last.) No one factor can be said to be the cause of this increase—it seems that this condition may yet be found for many years.

The University of Bristol laboratories have frequently been consulted for confirmation and diagnosis of parasites and obscure conditions. Thanks are due to Prof. K. E. Cooper, Director of Bacteriology Department at Canynge Hall, and to Dr. H. D. Crofton, Parasitologist of the Zoology Department, for their unflinching help and co-operation in these important aspects of meat inspection.

Refrigeration

The new cold room recently completed at the Gordon Road Public Abattoir has maintained meat in excellent condition and is much appreciated by all users at these premises. These facilities have eased the pressure of slaughter at peak demand times and has done much to increase the use of the Public Abattoir as a slaughtering centre for Bristol and the surrounding areas.

A certain amount of chill room accommodation is also available at Hotwells Lairs and a deep freeze chamber was added during the year for the storage of frozen lamb and mutton carcasses and offal.

Slaughterhouse Hygiene

The system first adopted in 1955 at the Public Abattoir for degreasing and sterilising equipment and cloths has worked very well indeed. Check samples from the slaughtermen's wiping cloths were submitted for bacteriological examination from time to time and in every case the bacterial count was satisfactory.

These methods are also employed at Hotwells Lairs, which are occupied by the Bristol Mutual Meat Traders. In addition, steam jets are used periodically to cleanse walls, floors and fittings with steam at about 80 lb. pressure.

The need for slaughterhouse hygiene is more widely appreciated and the methods now practised have generally improved, it being realised that talk of hygiene is futile if facilities to be clean are lacking.

Bacon Factories

The slaughter of pigs for the bacon trade shows a considerable reduction over last year's figures. There are four licensed bacon factories operating in the City and every effort is made by the managements to maintain reasonable conditions for the accommodation of animals, slaughtering facilities, and for the cooling and storage of the meat.

One firm has carried out a great deal of work to bring their premises within modern standards with glazed surfaces to walls, ample light, ventilation and washing facilities provided throughout the building. A new cutting room has been provided and satisfactory hygiene control introduced.

Meat Distribution Depots

Meat distribution depots situated in the Old Market Street area have operated to capacity throughout the year. A number of improvements have been carried out which included new concrete floors, and extra washing facilities. As a result of these improvements it can be said that the depots were maintained in a satisfactory condition.

Some meat traders operate a wholesale business from cold stores but one of these ceased so operating at the end of the year. Since de-control the position is very flexible and discussions with the Health Department on the suitability of premises as meat depots took place from time to time.

Meat supplied to School Canteens

Check visits were made to the canteens of the school meal service and there was no adverse comment on the meat supplied. One supplier of meat to schools has constructed a new and very satisfactory cutting room to deal with this class of trade.

Meat Transport

The *Food Hygiene Regulations 1955* repealed that part of the *Public Health (Meat) Regulations 1924* which dealt with meat transport, but these clauses in the new Regulations did not come into operation until 1st July, 1956. Every opportunity was taken to explain their responsibilities to meat transport firms and butchers through the various trade organisations. The general conditions in connection with meat transport in Bristol are reasonably good and no prosecutions were taken during the year. It was, however, noted that occasionally meat transport methods were used which may lead to action being taken for contravention of the Regulations and warnings were given in a few cases.

Disposal of Condemned Meat

Disposal of condemned meat and offal at the Public Abattoir is a comparatively simple matter. All condemned meat and offal is stained green and collected and treated in the City by one of the recognised processors. The other slaughterhouse, bacon factories and meat depots dispose of their condemned meat and offal in the same way and all firms have co-operated in ensuring that this class of material is despatched to a recognised processor. At these premises the condemned meat and offal is treated in a satisfactory manner and made principally into fertilisers. Certain exceptions are made (a) to the zoological gardens for feeding to animals but this meat is only from animals which have been condemned for certain specified conditions; (b) carcase meat so badly bruised that it is unfit for human consumption has been released for animal feeding, principally to dog kennels.

Knackers Yards

Only two firms have licences to carry on the business of a knacker. Both have made the necessary alterations to comply with the requirements of the Model Byelaws for Knackers yards and the *Slaughter of Animals Prevention of Cruelty (No. 2) Regulations 1945/55*, and are maintained in a reasonable condition. Very few live animals are slaughtered on these premises and the number of horses slaughtered in the City is infinitesimal.

Legislation

Under the Diseases of Animals (Licensing of Waste Food Sterilisation Plant) Order 1954, the Local Authority is authorised to inspect all piggeries and poultry premises where certain classes of swill are boiled. A start was made to inspect this class of premises in the City with particular reference to those licensed by the Ministry of Agriculture, Fisheries and Food. This task proved to be so involved that a special inspection form was compiled for the use of the district inspectors who were requested to make the initial inspections.

Part of the *Food Hygiene Regulations 1955* came into force on the 1st January, 1956, and the rest on the 1st July, 1956. Mention has already been made of the difficulties experienced when applying the regulations to meat transport vehicles. Most of these legal problems have now been cleared by the Town Clerk, and the regulations should be fully operative in the new year.

Certain premises are exempt from the regulations and these places include cold stores and slaughterhouses. It is pleasing to record, however, that splendid co-operation has been given by managers and staff of all meat depots within the City and the standard of hygiene is improving.

Cold Stores

Regular visits have been made to the three principal cold stores in the City. At one, considerable alterations are contemplated in the near future and plans for this work have been submitted. The other two are maintained in a reasonable condition.

Inspection of Meat and Other Foods

1955		1956
	<i>Visits:—</i>	
1,304	Slaughterhouses and bacon factories	1,481
3,040 {	Butchers' Shops	53
	Fish Shops	2,824
54	Food preparing premises	206
821	Meat markets	1,047
—	Street traders	—
—	Schools/Institutions	140
155	Cold stores	174
593	Other premises	608
	<i>Remedial action:—</i>	
—	Slaughterhouses cleansed	5
—	Slaughterhouses rebuilt, repaired or altered	1
—	Sanitary defects, etc.	—

Fish and Canned Goods Condemned

FISH					OTHER FOODS			
	Tons	cwt.	qrs.	lb.	Tons	cwt.	qrs.	lb.
1955 ..	7	12	2	8	28	5	3	5½
1956 ..	6	5	2	5	44	17	—	21

Meat Inspection—Animals Examined

1955					1956			
Hot-wells Lairs	Abat-toir	Bacon Factories and City	Total		Hot-wells Lairs	Abat-toir	Bacon Factories and City	Total
4,647	9,832	—	14,479	Beasts	6,356	11,158	—	17,514
1,554	2,886	—	4,440	Calves	2,012	4,472	—	6,484
19,643	15,603	—	35,246	Sheep	32,777	17,704	—	50,481
17,599	13,840	28,030	59,469	Pigs	13,071	14,839	20,589	48,499
—	—	—	—	Goats	—	—	—	—
43,443	42,161	28,030	113,634		54,216	48,173	20,589	122,978

Total Weight of Meat Condemned

			1955				1956			
			Tons	cwt.	qrs.	lb.	Tons	cwt.	qrs.	lb.
Hotwells Lairs	..	..	39	19	1	—	52	—	2	20
Abattoir	..	..	128	6	3	23	102	16	—	3
Bacon factories	..	..	16	11	2	15	12	1	—	1
Butchers' shops and City	..	..	9	14	—	27	10	—	—	12
Total	..	..	194	12	—	9	176	17	3	8

Inspection of Meat and Other Foods

1955		1956
Tons		Tons
66.25	<i>Meat destroyed from:—</i>	
128.35	Slaughterhouses and shops	74.09
—	Abattoir	102.80
33.6	Cold stores	—
	Fish, poultry, vegetables, etc.	51.91

Carcases and Offal Inspected and Condemned in Whole or in Part

	Cattle excluding Cows	Cows	Calves	Sheep and Lambs	Pigs	Horses
Number killed (if known)	13,056	4,458	6,484	50,481	48,499	—
Number inspected	13,056	4,458	6,484	50,481	48,499	—
<i>All diseases except tuberculosis and Cysticercosis:—</i>						
Whole carcases condemned ..	30	33	19	156	174	—
Carcases of which some part or organ was condemned	5,473	2,339	24	3,528	3,004	—
Percentage of the number inspected affected with disease other than tuberculosis and <i>Cysticercosis</i> ..	41·82	53·2	0·37	6·98	6·19	—
<i>Tuberculosis only:—</i>						
Whole carcases condemned ..	73	79	2	—	61	—
Carcases of which some part or organ was condemned	698	633	2	—	1,371	—
Percentage of the number inspected affected with tuberculosis ..	5·34	14·19	0·031	—	2·81	—
<i>Cysticercosis:—</i>						
Carcases of which some part or organ was condemned	45	6	—	—	—	—
Carcases submitted to treatment by refrigeration	45	6	—	—	—	—
Generalised and totally condemned	—	—	—	—	—	—

Carcases Condemned

	Hotwell Lairs			Abattoir			Bacon Factories/City			Totals		
	T.B.		Other Conditions	T.B.		Other Conditions	T.B.		Other Conditions	T.B.		Other Conditions
	1955	1956	1955	1956	1955	1956	1955	1956	1955	1956	1955	1956
Cows	Carcases	5	16	7	8	63	108	—	—	113	79	34
	Part Carcases	10	19	3	7	8	33	—	—	43	27	5
Other Bovies	Carcases	18	23	—	6	50	56	—	—	74	73	6
	Part Carcases	19	21	4	19	7	10	—	—	29	28	11
Calves	Carcases	—	2	3	6	—	4	—	—	4	2	20
	Part Carcases	—	—	—	1	—	—	—	—	—	—	1
Sheep	Carcases	—	—	44	131	—	—	—	—	—	—	86
	Part Carcases	—	—	15	27	—	—	—	—	—	—	15
Pigs	Carcases	15	12	89	80	27	31	34	42	80	61	220
	Part Carcases	2	2	15	34	6	6	2	27	10	14	69
Totals	Carcases	38	53	143	231	140	199	34	22	271	215	366
	Part Carcases	31	42	37	88	21	49	2	6	82	69	100
Weight in lb.	Carcases	14,617	24,113	12,081	18,142	70,685	91,816	5,546	4,573	111,979	99,371	44,676
	Part Carcases	5,165	6,661	1,659	3,961	2,309	8,647	113	240	13,925	9,210	4,605

Schedule of Whole Carcases and Parts Condemed Indicating Disease or Condition

Disease	Cows		Steers and Heifers		Calves		Sheep		Pigs	
	Car-case	Part Car-case	Car-case	Part Car-case	Car-case	Part Car-case	Car-case	Part Car-case	Car-case	Part Car-case
Actinomycosis ..	—	—	—	—	—	—	—	—	—	—
Abscess	—	1	—	3	—	—	8	9	13	52
Anaemia	—	1	—	—	—	—	—	—	—	—
Arthritis	—	—	—	—	—	—	—	3	—	7
Bruising	3	5	—	9	—	—	1	11	—	5
Corynebacterium ..	—	—	—	—	—	—	—	—	6	23
Malignant neoplasms	1	1	—	—	—	—	—	—	2	—
Caseous lymphadenitis	—	—	—	—	—	—	1	—	—	—
Emaciation	2	—	—	—	—	—	68	—	—	—
Fevered	—	—	—	—	—	—	1	—	5	—
Immature	—	—	—	—	4	—	—	—	—	—
Jaundice	—	—	—	—	2	—	—	—	—	—
Joint ill	—	—	—	—	—	—	—	—	—	—
Johnes	5	—	1	—	—	—	—	—	—	—
Mastitis-Septic	1	—	—	—	—	—	1	—	—	—
Melanosia	—	—	—	—	—	1	1	—	—	—
Moribund	5	—	—	—	1	—	9	—	5	—
Myo-degeneration ..	—	—	—	1	—	—	—	—	—	—
Oedema	2	—	2	—	4	—	27	—	4	1
Pericarditis	—	—	1	—	—	—	—	—	1	—
Peritonitis	2	—	8	—	3	—	4	—	21	2
Pleurisy	—	1	—	4	1	—	—	4	—	8
Septic pleurisy ..	4	—	8	—	—	—	30	—	52	—
Pneumonia	—	—	—	—	—	—	—	—	19	1
Pyæmia	1	—	2	—	—	—	2	—	11	—
U/Pyæmia	—	—	—	—	2	—	—	—	—	—
Septicæmia	4	—	7	—	—	—	2	—	25	—
Swine erysipelas ..	—	—	—	—	—	—	—	—	4	—
Uraemia	1	—	1	—	—	—	—	—	1	—
Pre-sternal calcification ..	—	—	—	4	—	—	—	—	—	—
Enteritis	—	—	—	—	—	—	—	—	4	—
Fat necrosis	—	—	—	1	—	—	—	—	—	—
Malformation	—	—	—	—	—	—	1	—	—	—
Lead poisoning	—	—	—	—	2	—	—	—	—	—
Meningitis	1	—	—	—	—	—	—	—	—	—
Total	33	8	30	22	19	1	156	27	174	79
Tuberculosis	79	27	73	28	2	—	—	—	61	14
Grand Total	102	35	103	50	21	1	156	27	235	93

Animals affected with *Cysticercus Bovis*:—

Cows	6
Steers and heifers ..	45
Total	51

(v) MILK AND FOOD INSPECTION

Legislation

Food Hygiene Regulations

One of the very important pieces of legislation of the year 1956 was *The Food Hygiene Regulations, 1955*, which came into force on 1st January, 1956. The application of those sections which involved the possibility of structural work was however suspended until 1st July, 1956, so that traders might have an opportunity of carrying out the required work.

Public Health Inspectors have welcomed such opportunity as these regulations afford, of raising the standard of food hygiene. The severe maximum penalties of £100 fine or three months imprisonment *or both*, for each contravention, together with the power of the Courts under the *Food and Drugs Act, 1955*, to close cafés, etc., have emphasised to everyone concerned the seriousness of this matter.

There is no provision for the service of notices in connection with these regulations so that, strictly speaking, every contravention found by inspectors could result in a prosecution. With certain exceptions, fortunately rare, in which conditions are so bad as to warrant immediate legal action, a policy of issuing written notifications has been followed which clearly indicates to offenders that they are in peril of prosecution and heavy penalties. A schedule of the contraventions is appended to these notifications and traders are given a reasonable period within which to comply with the regulations. Traders who have failed to take advantage of this period of grace have been prosecuted, and whilst this procedure is an attempt to educate rather than prosecute, it will in the light of experience obviously be open to review from time to time.

One regulation which is quite difficult to enforce is Regulation 9 (e) forbidding the use of tobacco or snuff whilst handling any open foods or being in any food room in which there is open food. The first difficulty is that this does not appear to apply to customers—although some people have tried to argue that it does! Thus, in a crowded restaurant or a crowded public house bar, dozens of people can be smoking, but the waiter or the barman dare not take even a pinch of snuff. Few people appear to realise that one of the principal reasons for this Regulation is that the use of tobacco or snuff brings the fingers into contact with the mouth or nose—both possible reservoirs of food-poisoning germs. This is, of course, the second difficulty, and often results in argument when the inspector finds a food handler standing in the doorway smoking. The food handler alleges that he is not actually in the room nor is he handling food—but the inspector knows that the man's fingers are undoubtedly contaminated and will be further contaminated when he removes his cigarette or throws it away when a customer enters. This situation has been met frequently in Bristol, and with the habit of smoking so widespread and so ingrained, it presents a constant hazard. Two traders who persistently refused to stop smoking in spite of repeated warnings were prosecuted in Bristol in 1956.

In one case the defendant was found guilty and was fine £5. In the other, he pleaded not guilty; was found not guilty by the Magistrates, who dismissed the case.

Another common cause of argument is the meaning of "wash hand basin" in Regulation 16. Traders often argue that an ordinary hand-bowl complies with this requirement. It is pointed out, however, that this is

one of the regulations which did not come into operation until 1st July and it is hardly likely that Parliament intended to give a person a period of six months to buy a bowl—such a period of grace obviously envisaged the necessity of structural work to fix a proper wash-basin. Equally, it is pointed out that this regulation is one for which an exemption may be claimed under certain circumstances, and there appears to be no justification for wanting an exemption from providing a small bowl. Obviously the legislature had in mind the problem of fixing a permanent wash-basin.

Inspectors have to spend much valuable time discussing this type of problem with traders, and they are, by this sometimes rather wearisome process, educating many food handlers to an appreciation of the importance of food hygiene, thus bringing about a considerable improvement in conditions under which food is being prepared and sold.

Types of Food Premises

The recorded number of food premises in the area is 4,012. This figure is made up of the following types:—

Bakers.. .. .	167
Butchers	430
Cafés	276
Confectioners.. .. .	286
Fishmongers and Fried Fish	248
Greengrocers	472
Grocers	1,289
Licensed premises	588
Off Licences	256

The Food Standards (Butter and Margarine) Regulations, 1955.

The Flour (Composition) Regulations, 1956.

The Food Standards (Curry Powder) (Amended) Regulations, 1956.

The Food Standards (Tomato Ketchup) (Amended) Regulations, 1956.

The Milk and Dairies (Channel Islands and South Devon Milk) Regulations, 1956.

All the above became operative during the year as food standards issued under the Minister's powers in the Food and Drugs Act, 1955.

The first four are re-enactments but the last mentioned is a new standard enforceable by Food and Drugs Authorities. It stipulates that no person may sell milk for human consumption, as Channel Islands, Guernsey, Jersey, or South Devon, unless it contains a minimum of 4 per cent milk fat. This condition is mandatory, there being no question of a presumptive standard, as is the case in the Sale of Milk Regulations respecting undesignated milk.

Samples—Miscellaneous

The 128 "miscellaneous" samples submitted to the Public Analyst or to the bacteriologist, in most cases are the result of complaints or requests for an opinion. Some arise from follow-up action on routine sampling. Of these, the following may be commented upon:—

Sweets

Analysis following a complaint respecting the flavour of sweets revealed an excessive amount of oil of wintergreen. The manufacturers were surprised to know these sweets were still on sale as they had ceased making them twelve months earlier.

Buttered Roll

An indignant customer of a City restaurant was sure a cat had urinated on a bread roll, but in spite of careful tests the Public Analyst was unable to confirm the allegation.

Egg Albumen

Several samples were secured from bakeries and submitted to bacteriological examination with negative results.

"Acid" Contamination

A wholesale food firm requested advice on alleged sulphuric acid contamination of bottled fruit drinks and packeted rice. A white deposit was noticed on the caps and necks of the bottles which the Public Analyst found was not due to acid. Enquiry as to the history eventually revealed splashing from broken containers of photographic "hardener" which was harmless.

Ice Cream

A manufacturer was found to be selling a particular brand of ice cream as "100 per cent dairy product." Such a product would of course find no sale as ice cream, if only by the absence of a sweetener.

As ice cream must of necessity contain several non-dairy ingredients, the company's attention was drawn to this infringement of the labelling provisions of the Food and Drugs Act. Having consulted the Town Clerk's Department the matter was successfully pursued and the firm agreed to amend the description.

Other complaints investigated included such things as mouse excreta in food, glass and metal in food, metallic flavour in tinned food, mouldy pies, fibres in coffee, bristles in sweets, dirty bottles of milk and all were suitably dealt with, some being the subject of prosecutions.

Legal Proceedings

Prosecutions were taken in the following cases :—

<i>Offence</i>		<i>Penalty</i>
Mouse excreta in meat pie	..	£25—plus costs
Metal in margarine	.. ..	£20
Nail in bun	.. ..	£10—plus costs
Card in bottled milk	.. ..	£3 3s.—plus costs
Adulterated milks (5)	.. ..	£25—plus costs
Metal in cake	.. ..	£5—plus costs
Wire in bread	.. ..	£5—plus costs
Nail in fritter	.. ..	£5—plus costs
Nail in loaf..	.. ..	£5—plus costs
Glass in bread	.. ..	£5—plus costs
Dirt in bottle of milk (2)	..	£10—plus costs
Mouldy pies (2)	.. ..	£2—plus costs, and £5

Milk*Chemical analysis*

Some 837 samples were submitted to the Public Analyst. Twenty-three contained added water. Eighteen of these were the subject of a warning by the Town Clerk to the producer and legal proceedings were taken in respect of five.

Fifty-three samples out of 77 deficient in fat were satisfactory on bulking the whole consignments and 52 were below the presumptive standard in non-fat solids. Warnings were sent to those producers of "Channel Islands" milk which were deficient in fat.

Many suggestions, including quality payments, have been made, but not adopted, to improve the non-fat solids content of milks.

As from the 1st October last a scheme became operative by which wholesale purchasers agreeing to co-operate will keep annual records of milk analyses. Producers failing to obtain an annual average of 3.3 per cent. and/or less than 8.5 per cent. non-fat solids will be reported to the Milk Marketing Board who may take further action, even to cancellation of contracts.

Biological examination

A total of 610 samples of raw milk including tuberculin tested were secured. All were examined for tubercle bacilli and for brucellosis. Seven samples from four producers were infected with tuberculosis but they were all consigned to processing dairies.

Samples of raw T.T. milk from all sellers within the City were submitted for examination regularly and none were infected with tuberculosis during the year.

One producer-retailer in the City was found to be selling raw T.T. milk infected with *brucella abortus* organisms and the Medical Officer of Health issued a notice under the Milk and Dairies Regulations in consequence of which the supply was sent to a dairy for heat treatment. Another producer-retailer outside the City was selling brucellosis infected milk within the City boundary and the Medical Officer of Health of the Local Authority concerned ordered heat treatment. One of these notices is still operative. Twenty-six other samples from 13 producers were similarly infected. In two cases subsequent samples were satisfactory. All were consigned to dairies for heat treatment.

All infected milks are now reported to the Divisional Veterinary Inspector of the Ministry of Agriculture, Fisheries and Food.

Designated Milk

Two hundred and seven samples of pasteurised milk supplied to schools, 265 of that for sale to the public and 48 sterilised milks were secured and submitted to the statutory tests. Twelve failed the phosphatase test and 2 failed the methylene blue reduction test. The methylene blue test was not applicable to 41 samples.

Two hundred and ten samples of raw T.T. milk were submitted to the methylene blue test and 35 failed. Appropriate action was taken in respect of all failures.

It is of interest to record that one retailer of T.T. milk started heat treating it. Enquiry from the outside authority revealed that he had no processer's licence and that he did so to improve the keeping quality. It was hoped he would apply for a licence and continue, but he failed to comply with the legal requirements and ceased processing.

Regular samples have been taken of the milk produced and processed at the farm maintained in the City by the Hospitals Board. All were satisfactory biologically but on two occasions samples failed to pass the phosphatase test. These are included in the previously mentioned figures.

Ice cream

Out of 146 samples submitted for chemical analysis one was deficient in fat, but a repeat sample was satisfactory.

A prosecution respecting an alleged deficiency of sugar in an ice cream sample (not in Bristol) was successfully contested by the trade association whose analyst had reported favourably upon one part of the sample. Evidence revealed that the portion submitted to the Public Analyst

had been transported and stored too long under unsatisfactory conditions when the atmospheric temperature was high. As a result of an investigation by the Public Analyst it was found that sucrose can be lost by conversion into dextran through bacterial action if ice cream is stored above a certain temperature for more than a very short period.

Arising from this case there has been some demand by the trade for specific instructions to be issued on the methods of sampling and storage of ice cream intended for analysis.

The 267 samples secured for the methylene blue reduction test during the year were graded as follows:—

Grade				1956	1955
1	..	..	..	152	136
2	..	..	..	69	81
3	..	..	..	22	34
4	..	..	..	24	55
				<hr/> 267	<hr/> 306

Consistent low grading was experienced in the product of one large national manufacturer. Steps to pursue the matter revealed that many authorities were having the same experience and a conference of local authorities and representatives of the company was arranged. It transpired that the firm had established another factory during the peak of 1955 heat wave and had over-reached the capacity of the plant and staff to cope with demand. They pleaded insufficient time to have remedied matters. The company was anxious to improve the situation and agreed to certain conditions suggested by the conference. Samples secured in Bristol from this firm since that date have shown a distinct improvement.

Ice lollies

No adverse reports were received from the Public Analyst on the 61 samples submitted for chemical analysis.

Other Foods

Of the 3,510 samples submitted for analysis, the following may be commented upon.

Sausages continue to vary in quality. Some were found to be more than half fat whilst others were below the standard which has been recommended to the Ministry for adoption.

A sample of "vinegar" was not genuine vinegar and it was deficient in the accepted standard of acetic acid. A warning was issued to the manufacturers.

Samples of "cream" confections were devoid of any milk fat. As it is an offence to sell articles of food with the description "cream" unless the substance is a milk product, the matter was referred to the Town Clerk.

A liqueur and a rum were found not to comply with the Food Labelling Order. The Company importing the former stated they had been doing so for ten years without question but they agreed to amend the labels. Amendment of the rum label was also secured.

So called "crystallised fruits" proved to be sweetened and flavoured jelly. The descriptions of some are such borderline infringements of labelling requirements that careful consideration is being given to further action.

Samples of "buttered" rolls and bread were reported as containing margarine or a varying mixture of butter and margarine. The vendors have been warned that such descriptions might be considered infringements of the Food and Drugs Act.

Medicines and Drugs

Some 237 samples were secured. One of peroxide of hydrogen contained 0.003 per cent. hydrogen peroxide instead of 2.5—3.5 per cent.

Camphorated chalk had deteriorated, one sample containing 0.8 per cent. instead of 10 per cent. camphor.

Ammoniated tincture of quinine was deficient in ammonia. Another contained an excess of quinine.

Indigestion mixture and a patent food were found to be practically useless by reason of age.

An anti-germ ointment contained less than the declared amount of zinc oxide, and samples of iodine were deficient; appropriate action was taken in each of the above cases.

Pharmacy and Poisons

Four hundred and forty-one visits were paid to premises of "listed" sellers to check compliance with the conditions of sale and storage. Samples were obtained to test the accuracy of labels.

A nicotine fumigator was not labelled in the correct manner. It was found to be old stock of which no more was obtainable.

A fluid disinfectant was described as "equal to the best and better than the rest." The disinfecting co-efficient was well below that of similar products and the retailer's attention was drawn to the possibility of an infringement of the Merchandise Marks Act.

Sampling at Corporation Establishments

In addition to milk samples at schools, 304 articles of food were secured for analysis from four school-kitchens, the Central Purchasing Department and No. 100, Fishponds Road. All were satisfactory with a few minor exceptions of old stock which were destroyed.

The 3,017 samples of food and drugs submitted under the Food and Drugs Act, 1955, based on the estimated population of 444,500 represents 6.8 per thousand.

Fertilisers and Feeding Stuffs

Fifty-eight formal and 89 informal samples of fertilisers and animal feeding stuffs were obtained for analysis. The Agricultural Analyst reported that in 19 cases the constituents were outside the permissive limits of variation from those declared; 10 of these were not "to the prejudice of the purchaser."

No statutory statement was supplied in respect of 9 samples. Appropriate action was taken where necessary.

Notices

One hundred and seven informal and 3 statutory notices were issued by the Food and Drugs Section during the year, of which 48 and 3 respectively were complied with. In the case of the remaining 59 informal notices, action was not complete at the end of the year.

Food Poisoning

Eighty-three notifications of suspected food poisoning were received during the year. Forty-five were confirmed by faeces specimens. There were no serious outbreaks but at one school in July, 25 scholars and staff were taken ill during a night with food poisoning symptoms. A dinner eaten by all the victims consisted of roast meat, vegetables and apricot flan with a cream made from a proprietary powder. No part of the meal was obtainable but a sample of the powder base was reported bacteriologically satisfactory. Faeces specimens from the absentees were negative.

At another school several children were ill after lunch. A confection made by scholars in a cookery class came under suspicion, but a portion of this and ingredients yielded negative results and all victims were at school the following day.

Dysentery

There were 498 confirmed cases of dysentery out of a total of 665 notified to the Department. More than one-third of these occurred in February and March and were associated with a considerable outbreak at a nursery school. This involved 616 visits by inspectors to 177 families from which 196 persons returned positive faeces specimens. Sixty-three were nursery school children and 42 were contacts from other schools. Twenty-nine food handlers were found and checked and the 6 infected represented 20·6 per cent. Some of the infected children continued positive excretions for several months.

Typhoid and Paratyphoid Fever

No cases of typhoid fever were notified to the department but 4 of suspected paratyphoid plus one family of contacts were visited. None was confirmed.

A baby admitted to Ham Green Hospital with suspected paratyphoid fever was infected with a food-poisoning organism which was also isolated from the faeces of the family's pet tortoise. The mother complied with the advice to have the tortoise destroyed.

Corn Production Acts (Repeal) Act, 1921

Five complaints of injurious weeds were dealt with during the year.

Disposal of Condemned Foodstuffs

When a district public health inspector or an inspector of the Food and Drugs Section condemns foodstuffs, a detailed record of the condemnation is sent forthwith to the Superintendent of the Disinfecting Station, who arranges for the condemned food to be collected. The food is, thereafter, destroyed under Corporation supervision, either by burning or by burial in tips. This procedure relates to small quantities of foodstuffs only, say up to quantities of one ton. If larger quantities of foodstuffs are involved, it is usual to contact the Animal Foodstuffs Division of the Ministry of Agriculture, Fisheries and Food, to ascertain whether that Division could use the condemned foodstuffs. If so, the Ministry makes its own arrangements for collection and disposal. On the other hand, if the Ministry cannot use the foodstuffs, then its removal for destruction is carried out in the manner set out above.

Fish condemned at the wholesale Fish Market as unfit for human consumption is placed in bins provided by the Corporation and is collected daily by the Transport and Cleansing Department and disposed of by them.

Details of the disposal methods of condemned meat at slaughtering centres and of various foodstuffs at the port are set out under the appropriate sections of the report.

Dairies and Milkshops etc.

1955	Registrations								1956
	<i>Milk and Dairies Regulations, 1949</i>								
68	Dairies								67
578	Distributors								620
	<i>Milk (Special Designation) Regulations, 1949</i>								
15	Pasteurised: Dealers' (Pasteurisers) Licences								12
366	„ Licences								368
8	„ Supplementary Licences								18
2	Sterilised: „ (Sterilisers) Licences								2
486	„ Licences								501
8	„ Supplementary Licences								9
29	Tuberculin „ Licences								31
10	Tested: „ Supplementary Licences								9
	<i>Food and Drugs Act, 1938</i>								
31	Manufacture, storage and sale of ice cream								28
1,175	Storage and sale of ice cream								1,196
	Preparation of sausages or potted, pressed, pickled or								
206	preserved food								212
138	Fish frying premises								140
10	Butter factories								—
45	Wholesale dealers in margarine								—

Dairies and Milkshops etc.

Samples Taken	Samples not Satisfactory	Chemical Analysis	Samples Taken	Samples not Satisfactory
1955			1956	
525	38	Milk	837	81
264	—	Ice cream	146	5
1,986	15	Other foods	1,798	6
386	—	Medicines and drugs	236	10
34	—	Poisons	12	4
44	—	Rag flock	44	—
173	31	Fertilisers and feeding stuffs	147	10
265	51	Water (Baths)	115	13
50	1	Water (Other)	70	—
136	10	Miscellaneous	104	43
		<i>Bacteriological examination:—</i>		
420	2	Milk T.B. exam: City	610	41
		Somerset		
		Gloucestershire		
		Other Counties		
298	9	Milk, pasteurised	265	12
49	—	Milk, sterilised	48	—
175	—	Milk, schools	207	1
190	33	Milk, T.T.	210	35
306	90	Ice cream	267	19
164	27	Plant tests	124	14
327	64	Churn and bottle tests	373	101
56	16	Shellfish	80	18
108	10	Water	83	10
73	2	Miscellaneous samples	24	1

1955	Visits (Not Sampling)	1956
478	Pharmacy and poisons	441
271	Dairies	196
236	Ice cream shops	178
—	Ice cream manufacturers	—
289	Food preparing premises	—
348	Butchers shops	561
61	Infectious diseases (except food poisoning)	29
376	Dysentery	1,466
—	Food poisoning	195
81	Noxious weeds	15
31	Rag flock	3
1,372	Other visits	543
	<i>Notices</i>	
38	Informal notices	107
37	Informal notices complied with	48
11	Statutory notices	3
12	Statutory notices complied with	3
	<i>Remedial Action</i>	
—	Premises new built	—
3	Premises altered and repaired	3
11	Premises cleaned and decorated	5
9	Other defects remedied (premises)	48
16	Hot water handwashing facilities provided	17
24	Heating provided	15
1	Drainage—Drains tested	2
1	Drains repaired	3
—	Choked drains repaired	—
5	Water closets—Flushing appliances provided	3
2	New pans provided	2
11	Other repairs	5
—	Lighting provided	20
8	New plant installed	—
22	Other nuisances abated	28

Other Registrations, Licences, etc.

1955		1956
—	<i>The Rag Flock and Other Filling Materials Act, 1951</i>	—
4	Licences to manufacture rag flock	4
30	Licences to store rag flock	30
	Premises registered to use filling material	
25	<i>Pet Animals Act, 1951</i>	31
	Licences to keep a Pet Shop	
504	<i>Pharmacy and Poisons Act, 1933</i>	528
	Listed Sellers of Part I Poisons	
69	<i>Slaughter of Animals Act, 1933-1954</i>	70
	Licensed Slaughtermen	
4	<i>Food and Drugs Act, 1955—Section 62</i>	4
1	Licensed Slaughterhouses (Bacon Factories)	1
	Licensed Slaughterhouses	
2	Licensed Knackers' Yards	2
6	<i>Public Health Act, 1936</i>	6
10	<i>Offensive Trades—Annual Consent—</i>	10
	Premises	
	Trades	
1	<i>Offensive Trades—Seven-yearly Consent—</i>	1
1	Premises	1
	Trades	

Statistics

Samples submitted to the Public Analyst
1st January to 31st December, 1956

	1956	1955
Sampled under the <i>Food and Drugs Act</i> :—		
Dry goods, spirits and drugs	2,180	2,636
Milk	837	525
Total	3,017	3,161
Water, swimming baths	116	265
Water, others	70	80
Filling materials	44	44
Fertilisers and Feeding Stuffs	147	173
Poisons—part II	12	25
Miscellaneous	104	132
Total	493	719
Grand Total	3,510	3,880

City Water Supply*Particulars required by the Ministry of Health Circular*

1. Whether the supply of the area and its several parts has been satisfactory in (a) quality (b) quantity	Yes
2. When there is a piped supply, whether bacteriological examinations were made of the raw water and, where treatment is installed, of the water going into supply ; if so, how many and the results obtained ; the results of any chemical analysis.	Raw waters examined bacteriologically before treatment by Bristol W.W. Co. Raw water at Barrow before filtration—weekly. Raw water at Chelvey before chlorination—twice weekly—when pumping. Raw water at Litton before chlorination—weekly. After treatment found satisfactory.
3. Where the waters are liable to have plumbo-solvent action the facts as to contamination by lead, including precautions taken and number and results of analysis.	Water is not liable to lead contamination and this is confirmed by weekly analysis of all City supplies.
4. Action in respect of any form of contamination.	On finding any trace of faecal contamination the matter is taken up with the appropriate authority immediately when further samples are taken until satisfactory results are obtained. Contamination after treatment has been negligible.
5. Particulars of the proportion of dwelling houses and the proportion of the population supplied from public water mains :— (a) direct to houses ; (b) by means of a standpipe.	(a) The whole of the population in the Bristol area is supplied by public water mains direct to houses with the exception of a few isolated premises in the rural suburbs where the supply is from private wells and subject to a form of chlorination. These are gradually being reduced as mains supply is laid on. (b) Negligible.

(vi) ATMOSPHERIC POLLUTION**Cleaner Air Campaign**

For those working towards a cleaner atmosphere, 1956 ended on a fine note in that, after the overture of the Beaver Report, we were presented on the last day of the year with the first operative measures of the *Clean Air Act*, which had been given Royal Assent the previous July.

During the year now under review the records show that apart from plants visited as the result of complaints of smoke nuisance, a great deal of surveying of other boiler and furnace plant was carried out by Senior District Inspector Hopper who has special responsibilities for this work. This survey work served not only the purpose of assessing potential nuisances, but also afforded opportunities of spreading some preparatory information in relation to the *Clean Air Act*. In most cases the engineer or other responsible person of the firm concerned was interviewed and the main clauses of the *Clean Air Act* were explained to them. It was clearly pointed out that the period of grace before the Act came into force could in many cases be used advantageously in making improvements that would have a beneficial effect not only on the health of the public but also on the firm's fuel expenses.

As with all public health work there has been constant encouragement and vigilance carried out by the Department's officers in connection with smoke abatement. It can be said, however, that in most cases there has been genuine co-operation from offending firms. During the past year either as a result of the Department's action or from a desire to modernise their furnaces, many firms and public authorities have installed improved means of fuel combustion. Some have changed from coal to oil-firing, which has certain advantages over solid fuel, but the Suez Canal situation which led to oil-fuel rationing, postponed the switch to oil firing in many cases. Experience has shown, however, that oil fuel can, with mis-handling, give rise to nuisance as severe as that associated with coal burning.

Other improvements have been attained by the installation of mechanical stokers to replace the hand firing of coal. In all these cases, the installations, representing the full range of mechanical stokers, have proved to be worthwhile in their economy and smokelessness.

Where complaint of excessive smoke was made, it was found in almost every case, that the offending plant was hand fired with coal. Often for reasons of cost the firms concerned were not prepared to install mechanical stokers and low volatile coal was the only answer, although sometimes it was noted that repair and proper maintenance would bring about improvement and this was pointed out to the firms. In connection with the selective delivery of coal, this procedure cannot be adopted *ad infinitum* as the National Coal Board has to find an outlet for the more plentiful bituminous coals, and allocate fairly the steam coals, which are in shorter supply.

There were also many complaints from the public about grit nuisance; investigation into three such cases showed that, although some form of grit arrestment apparatus was in use, insufficient attention was being given in two cases to the emptying of grit-collecting bins. In the other case it was apparent that the grit arresting plant was not capable of dealing with the large amount of fuel burned and this boiler plant is to be completely replaced by an oil-fired installation which will come into use during 1958.

A different type of atmospheric pollution complaint came to a head during 1956. For some years modernisation has been going on at the Eastville works of the South-Western Gas Board and in connection with this work a Liquid Purification Plant for the removal of hydrogen sulphide from the coal gas was installed. In the regeneration of the spent liquid, air is blown through it to precipitate sulphur and sulphur compounds. The air, after passing through the liquid, was exhausted to the atmosphere and carried with it a complex mixture of gases of a most unpleasant nature. After much discussion and correspondence between the Local Authority and the Gas Board a meeting was arranged between the Chairman of the Health Committee, the Chief Public Health Inspector, and representatives of the Gas Board. The public health importance of clean air was stressed and consequent upon this discussion and as a first step towards complying with the Health Committee's requirements, the exhausted air from the Liquid Purification Plant was ducted to the retorts and burnt. This equipment was still in the testing stage at the end of the year, but in addition, the South-Western Gas Board made it clear that further works would be carried out if found necessary to avoid cause for complaint.

Although the powers of prior approval for heating installations given by Section 3 of the *Clean Air Act, 1956*, were not operable during the year,

a great deal of this work was achieved by discussions with architects and firms submitting plans.

A Senior District Inspector, Mr. G. Hopper, who has special responsibilities in connection with atmospheric pollution was appointed during the early months of 1956 and he has done excellent work on this important environmental health matter. This is reflected in the increasing attention now being given to the importance of clean air and the records show that during the year 1,400 visits and observations were made by the inspectorate, an increase of nearly 600 over the previous year.

This officer has played a great part too, in the organisation of a course of training for the Smoke Inspectors' Certificate of the Royal Society of Health. This course, which was attended by some 20 inspectors from Bristol and adjoining districts, included lectures on fuel combustion and boiler-plant management with practical demonstrations of various types of equipment. Representatives of industry seeking a solution to combustion problems, also received much valuable information at a Fuel Efficiency Conference and Exhibition organised by the Bristol Chamber of Commerce.

National Smoke Abatement Society

The Annual Conference of the National Smoke Abatement Society was held at Southport. The Bristol Health Committee was represented by Alderman J. J. Milton, Chairman of the Health Committee, and the Chief Public Health Inspector.

The interest taken by Bristol in fostering clean air both locally and nationally was recognised in that Alderman J. J. Milton was again elected a Vice-President and the Chief Public Health Inspector was re-appointed Chairman of this Society.

(vii) GENERAL ENVIRONMENTAL HEALTH WORK

Homes for the Aged—100, Fishponds Road

Last year's report recorded the detailed inspection of the home, the presentation of the report to the Medical Officer of Health, and its acceptance by the Welfare Services Committee, when it was agreed that improvements should be carried out on a priority programme basis.

It is pleasing to record that the half yearly inspection revealed work had already started on a pilot scheme to improve a bedroom in one block. This involved a new composition floor, redecoration, breaking the sleeping ward into smaller units by reinforced glass partitioning, provision of a bay of wash-hand basins in the bedroom, additional water closet accommodation, and improved artificial lighting and furnishing. Other projects under way include additional mechanical and natural ventilation facilities in the main kitchen and provision of sanitary accommodation and wash-hand facilities for kitchen staff.

Another feature worthy of note is the improvements in the dish washing facilities; a recognized detergent sterilant process is now carried out. With the agreement of the Welfare Services Officer, arrangements were made for clean food talks to be given and films to be shown to those engaged, to any extent, in food handling. Eight food hygiene sessions were given and every member of staff including the matron, her deputy, sisters, nurses, daily helps, kitchen staff and ward orderlies attended, in turn.



The two sets of photographs demonstrate the comparison between the old, now disused, Church Army Hostel and the new.

Top Left. The poorly lit, narrow passaged cubicle accommodation of the old hostel.

Top Right. The wider and well lit passage approach to the cubicle area of the new hostel with its bright, easily cleaned surfaces.

Bottom Left. Part of the kitchen of the old hostel showing the equipment and utensil washing facilities.

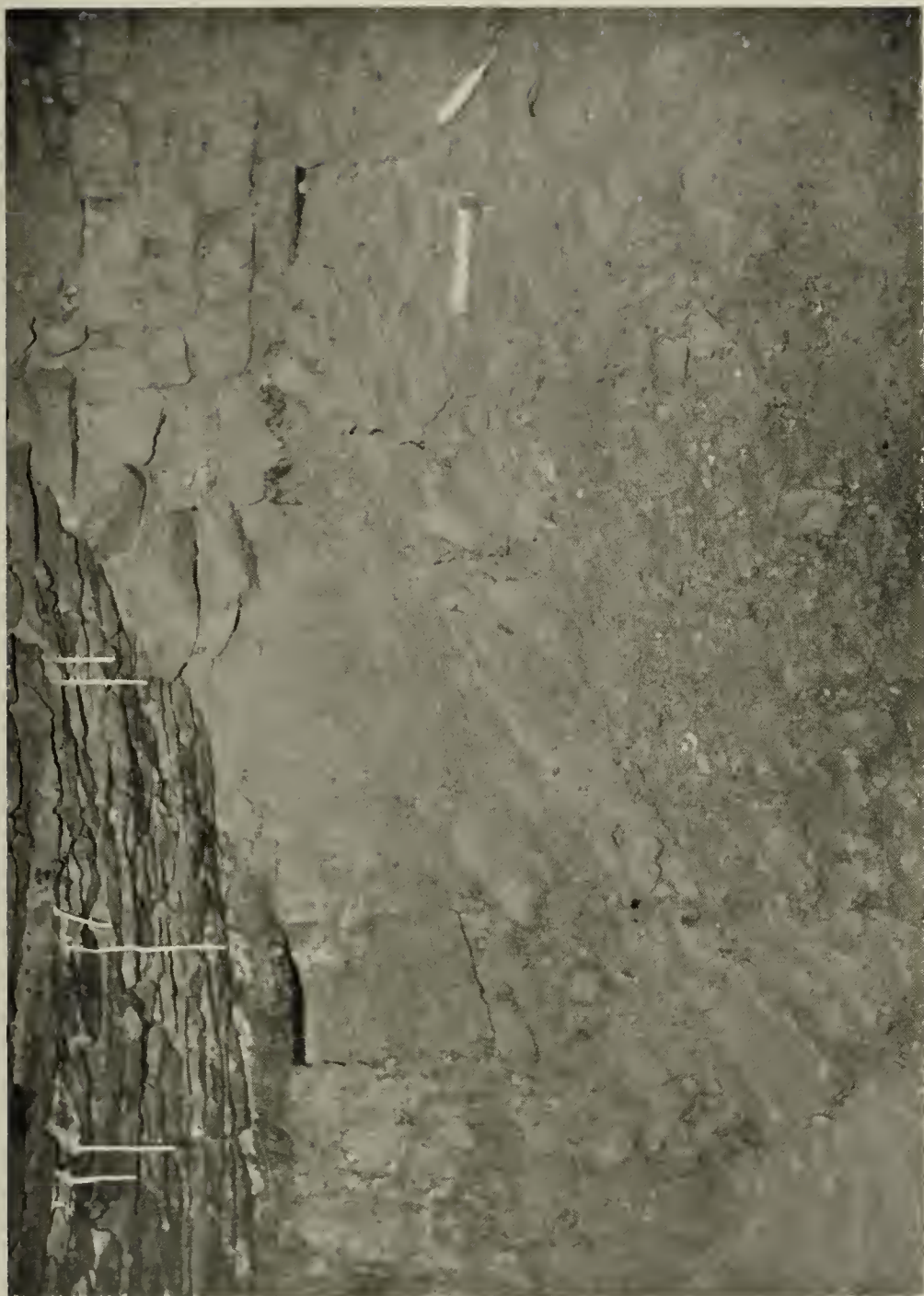
Bottom Right. The hygienic and well equipped kitchen of the new hostel.



TRUST ESTATE RE-DRAINAGE SCHEME

The two photographs show:—

- (1) Settlement cracks in the side wall of a house, which was a condition found generally throughout the estate.
- (2) Under-pinning work in progress to one of the more seriously affected houses.



Stalactites found in a disused cesspool in one of the historic squares of the City.

Hotels for the Homeless and the Aged

The changing mode of living, the various health facilities provided by local authorities, and full employment have to a large measure eliminated the need for the class of housing known as "common lodging houses". At the present time there are no registerable common lodging houses in the City. This was not always the case. Reading through the annual reports of years gone by reveals that, for instance, in 1910 there were 44 such houses resorted to by 1,573 men, 35 women and 54 married couples. The number over the years fluctuated due to the closure of some by the Health Committee or for economic reasons. In the mid-1930's clearance areas which included concentrations of common lodging houses, also did much to reduce this type of accommodation in the City.

Today there is still a need to accommodate that class of person who is without a settled way of life or is homeless. The Church Army, Salvation Army, and municipal hostels now supply this need and, in addition, provision is made in each hostel for accommodating a number of active aged men.

During the year a new Church Army hostel was completed and opened. The high standard of the building and accommodation provided is indicative of the demand for this class of lodging. Kitchens are modern in design and equipment. Dining rooms are spacious and well appointed and lounges are furnished with comfortable chairs. The bedrooms have built-in wardrobes and individual bed lamps.

When the new Church Army hostel was opened, the old one, set to the rear of the new Broadmead shopping area, was closed, and the photographs clearly show the difference in the standards of the old and new hostels.

Plans and Planning

The well established arrangement whereby certain plans submitted to the City Engineer's Department are passed to the Chief Public Health Inspector's office for comment continued during the year. In all, 572 plans were received and examined, and correspondence was entered into direct with proposers or their representatives. The distribution of plans by the City Engineer to all interested departments ensures that prior to the final acceptance of the plans an opportunity is given to secure that acts of Parliament, byelaws, regulations and standards are complied with before the project is embarked upon. The correspondence with proposers and architects is obviously appreciated, since almost without exception the Department is thanked for the comments and suggestions made. It is not uncommon for architects to call at the Chief Public Health Inspector's office with their outline plans in order that they may be assisted in producing proposals which will meet with our approval. If possible personal calls are made on architects and statutory requirements discussed. Extracts of acts, byelaws and regulations are given on request. This principle of personal approach is of advantage since a much higher percentage of plans are being received where little or no comment is required.

Apart from byelaw plans the Department is also invited to comment on "planning permission" proposals. Here too, every advantage is taken to ensure that no public health nuisance will arise as the result of any particular type of development. An instance where such a system is of great advantage concerned an application to establish a milk farm proximate to existing and new dwelling development. The Department

had no previous experience of mink farming so, in order to fairly assess any potential nuisance that might arise from such a project, a neighbouring rural authority was visited where a mink farm had been established for some time. A combined visit by representatives of the City Planning and Public Health Departments resulted in the application being turned down since public health nuisances could arise and there would be depreciation of amenity to the neighbouring residents.

Redevelopment and Exhumations

The acquisition of land in the central area of Bristol under the Town and Country Planning Acts for the purposes of redevelopment has involved a large measure of control during the year over exhumation of human remains in burial grounds attached to various religious denominations.

The *Town and Country Planning (Churches, Places of Public Worship and Burial Ground) Regulations, 1950*, lay down that no land which at the time of acquisition or appropriation consisted of a burial ground or part of a burial ground shall be used by the acquiring or appropriating authority until the human remains therein have been removed and re-interred in accordance with the requirements prescribed by the Regulations. The Regulations further state that the removal of all human remains shall be effected and the remains re-interred in accordance with the directions of the Medical Officer of Health for the district where the land is situate. During removal the ground must be screened from public view and wooden shells provided where coffins have perished.

In addition a copy of the "Licence for the Removal of Human Remains" issued by the Home Office and sent to the Medical Officer of Health for information requires the removal of remains with due care and attention to decency and the use of freshly made ground lime for sprinkling over the coffin, soil and any matter that may be offensive.

Excavations in one burial ground revealed remains of fourteen bodies some of which had been interred since 1827. In another instance excavations in a burial ground to a depth of 6 ft. 8 in. resulted in 680 bodies being exhumed. All exhumations were carried out by the staff of the City Engineer's Department and repeated visits were made by the staff of the Chief Public Health Inspector in order to ensure that Home Office instructions and Town and Country Planning Regulations were carried out in relation to decency, screening and liming.

Since burials dated back to the early 1800's the remains consisted principally of bones. Clay pipes and drinking horns associated with burials were frequently found. Individual identification of remains was impossible in the main, so that re-interment took place in common graves in cemeteries within the City. In a few cases private arrangements were made by relatives for re-interment.

Sanitary Conveniences used in Connection with Building Sites

During the year whilst consideration was being given by the Medical Officer of Health to the possible causes of outbreaks of dysentery, the question of sanitary arrangements on building sites was raised by the Chief Public Health Inspector. Arrangements were accordingly made with the Housing Manager and the City Engineer and Planning Officer to provide weekly lists of all private and industrial building development sites. The details given on these lists, together with returns from Her

Majesty's Inspector of Factories under the provisions of Sections 107 and 108 of the *Factories Act, 1937*, were passed to the district inspectors for the areas concerned.

A system of visiting was then commenced to ensure that sanitary arrangements on these building sites were satisfactory and that disposal of contents of temporary closets was so arranged as to prevent spread of infection or public health nuisance.

During the year the district inspectors submitted reports on 89 separate building sites, and these disclosed that in some cases the contents of temporary closets were not being disposed of in a satisfactory manner. In most cases the district inspectors were able to arrange with the builders concerned that the contents of temporary closets were discharged into the nearest sewer, or that more permanent sanitary accommodation was used. In only seven cases was it necessary to send formal notification to builders that their arrangements for sanitary accommodation were unsatisfactory, but in no case was it considered necessary to ask the Town Clerk to institute legal proceedings. The perusal of the various reports submitted during the year leads to the conclusion that building contractors in this City are co-operating well with the Local Authority and that arrangements for sanitary accommodation on building sites are of quite a good standard.

Estate Re-drainage Scheme

A survey of a Trust Dwelling Estate some years ago showed that some of the houses were subject to settlement and at that time a certain amount of under-pinning was carried out as a stabilising measure. A survey in 1954, however, indicated that settlement of dwellings was more generalised than at first anticipated. In an effort to determine the cause of the settlement investigations were carried out and showed drains to be poorly constructed, unsupported, and extensively fractured. As further investigation proceeded it was obvious that the defective condition of the drainage was general throughout the estate. Since the estate comprised 192 housing units it was evident that piecemeal renewal of the drainage was impracticable.

It was decided with the concurrence of the Estates Surveyor that a complete relay of the whole drainage system was necessary and, in order to avoid unnecessary inconvenience to the residents, the existing drainage was allowed to remain while the new drains were laid on a new line. As each house was connected to the new system, the existing drains were effectively filled in and sealed off to avoid rat harbourage. In all, the work took 15 months to complete and involved the laying of $4\frac{3}{4}$ miles of drain.

The whole project was carried out under difficult circumstances since the ground throughout is of a very light red sandstone type, having a natural angle of repose of 40° . In addition, the ground was very pervious. Much experimental work with varying forms of shoring equipment was necessary since it was found unsafe to excavate deeper than 18 inches before inserting shoring. The extent of the problem can be appreciated when it is realised that excavations in some instances were to a depth of 16 feet. All work was carried out by the Trust Estate contractors and the whole of the work was supervised by the district public health inspector.

Stalactites in the Cesspool

As can be envisaged in an ancient city such as Bristol, subground investigation often brings to light disused, museum type methods of sewage disposal.

An interesting example was discovered during an investigation into heavy rat infestation in a house at one of the old squares in the Hotwells area of the City. It was established that rats were gaining access to the house via an old disconnected stone drain which discharged into a communal cesspool. The cesspool chamber was beautifully arched in stone, 14' X 16' in area, and was on an average 7' high. Nine connections formerly conveyed the sewage from eighteen houses in the square. No overflow pipe was discovered.

The photograph shows a view of the interior and two of the connections. The large heap of loam appeared to have been deposited as the result of rat workings and was honeycombed with runs. The stalactites lend an air of antiquity to the scene.

Technical Training

There are a limited number of centres in the country where technical training facilities are available. This in some measure has probably accounted for the shortage of trained public health inspectors since such centres are inaccessible to many who would, had conditions been more favourable, have taken up this field of public health work as a career. Many inspectors having gained their statutory qualifications become appointed to posts in districts where little opportunity is available for further study and achievement of additional qualifications.

Bristol has in its university and colleges splendid opportunities for technical training and full use is made of the facilities available. In order to meet the demand for initial and additional qualifications three public health courses were started in September, a Public Health Inspectors' Course, Inspectors of Meat and Other Foods Course, and a Smoke Inspectors' Course.

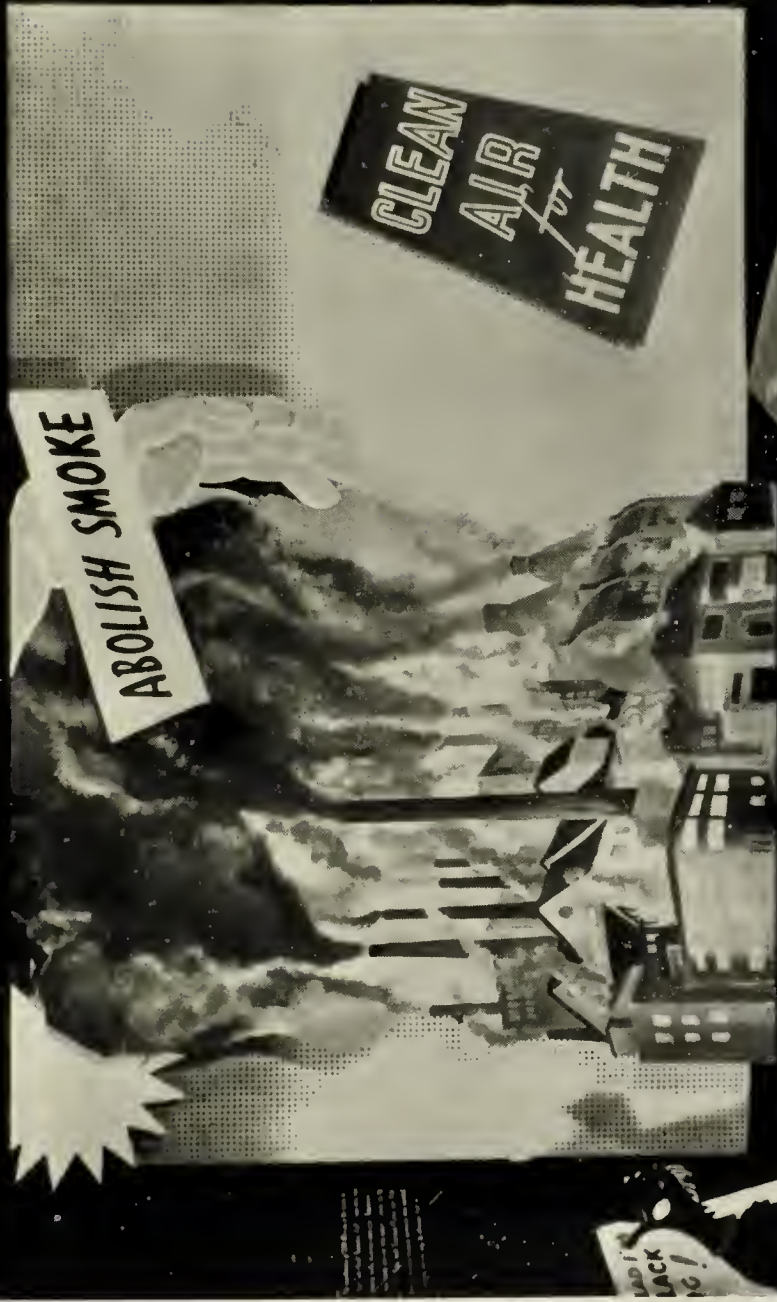
In addition to the three courses for Public Health Inspectors and trainees, the Chief Public Health Inspector's staff has, during the year, also been invited to give series of lectures and to arrange practical demonstrations for Health Visitor Courses, Housing Manager trainees, Basic Catering, Licensed Victuallers and House Matron Courses.

In organising these courses the Chief Public Health Inspector enjoys the full co-operation of the Department of Preventive Medicine, City Analyst, the Building and Engineering Departments of the College of Technology, and the College of Commerce. It is a pleasure, too, to record the ready and unfailing assistance given by Bristol Corporation Departments and a large number of trade organisations throughout the City in providing valuable facilities for the practical visits.

Trainee Public Health Inspectors

The trainee scheme which was instituted in 1955 is proving valuable not only to the trainees but to the Department. Two of the trainees are now taking the Public Health Inspectors' Course, while the remaining four are completing their initial building construction training.

YOUR SHARE • CLEAR THE AIR



A Clean Air display produced by the Department during the year for use in shop windows and Trade Exhibitions.



One of the Clean Food displays produced by the Department during the year for use in shop windows and Food Trade Exhibitions.

A programme of training is organised for them which allows time to study a different aspect of public health inspectors' work every six months. They are thus allocated on a rota system to all the following sections of the office in turn: Housing; District Work; Port Health; Food and Drugs; and the two principal slaughtering centres in the City.

All the students take an active part in both the office and practical work connected with each section. It is clear that this system of traineeship is the best way of ensuring that public health inspector students receive a full and comprehensive practical and theoretical training for the profession they have chosen to follow.

Health Education

Health education is now accepted as a valuable contribution to the promotion of health and a positive means of encouraging sanitary environments. No child is too young, or any adult too old, to benefit from health information or instruction.

Health is something which all seek but which we tend to neglect sometimes from ignorance, or because it involves too much self-discipline. Health education by public health inspectors is, therefore, intended to arouse interest in health; to safeguard health in ourselves and others and to promote healthy environments. Officers of the Chief Public Health Inspector's section are taking an active part by talks and demonstrations, with the use of visual aids and displays, to bring home to all sections of the community the advantages of healthy living.

Health education too, includes talks and discussions with trade organisations, especially those associated with food supply.

It is pleasing to record that having embarked upon this field of health education some years ago, the Chief Public Health Inspector does not now have to seek those who will listen but receives frequent invitations to give talks on environmental health matters.

During the year talks were given to 950 trainee teachers and secondary school children of the school-leaving class, and some 700 members of trade organisations and the general public. It is the Chief Public Health Inspector's policy to meet with the same enthusiasm requests for talks whatever the size of the group seeking this service. Much of this work is done outside normal office hours.

The photographs show two of the displays produced by the Health Department during the year.

Foreign Visitors

During the year nine visitors from other countries visited the Chief Public Health Inspector's office and were given instruction in all aspects of this section of the Public Health Department. The countries of origin of the visitors were: Sudan, South Africa, Sierra Leone, Kuwait. The flood of visitors in the immediate post war years, representing, as they did, both central and local government in their own countries, appears to be receding. Our friends from overseas are very appreciative of the help and instruction given to them and have expressed admiration for the public health control exercised in this country.

(viii) RAT DESTRUCTION, DISINFECTION AND DISINFESTATION

Rodent Control

During the past ten years there has been a revolution in the methods of dealing with rodents and other pests. In place of "Rat Week" there is now a continuous process of co-operation between Government scientists and local authorities' staffs.

Rats are now subject to an all-out attack in their harbourages and breeding places in sewers, tips, railway and river banks, industrial and domestic premises. Allied to this drive is the encouragement given to the general public to report the presence of rats wherever they may be found.

The following detailed information of the work carried out has been provided by the Rat (Repression) Officer.

The total number of complaints received during 1956 was as follows:—

Rats..	..	..	..	1,744
Mice	..	..	..	999
Total	..	..	..	<u>2,743</u>

The number of complaints brought forward from the previous year as incompletely dealt with was 96 making the total number of complaints 2,839, and to deal with these complaints, the Rat Operators made 17,751 visits.

The following table shows how these complaints were dealt with:—

				<i>Business Premises</i>	<i>Dwelling Houses</i>	<i>Local Authority</i>	<i>Total</i>
No action required	..	..	..	27	131	4	162
Cleared by Department	..	..	..	941	1,104	439	2,484
Cleared by occupier	..	..	..	14	62	—	76
Incompletely dealt with c/fwd...	..	..	..	49	46	22	117
Total	..	..	..	<u>1,031</u>	<u>1,343</u>	<u>465</u>	<u>2,839</u>

Under Part 1, Section 3, of the *Prevention of Damage by Pests Act, 1949*, 2,667 occupiers notified this department that rats and mice infested their premises and appropriate action was taken.

Demolition and rebuilding work and clearing of vacant sites was closely watched, but no serious infestation or movement of rats could be found.

The Corporation refuse tips, destructor works, river-banks, parks and open spaces were regularly inspected, and infestations found were brought under control. Inspections were made at 174 premises where fowls were kept and advice given on the siting and rat-proofing of fowl houses.

Early in the year a number of improved concrete baiting containers, designed by the Rat Officer, were placed in sections of the sewer system and these showed appreciable results when the sewer treatment was carried out. Investigations in collaboration with the City Engineer's officers and those of the Ministry of Agriculture, Fisheries and Food were carried out regarding the methods of rodent control in the City's sewer system. Information gathered from these meetings may lead to further reduction of the rat population in the sewers, with a lowering of the overall cost of this work.

The number of manholes baited during the two maintenance periods in 1956 was 4,501, of this number 2,847 showed pre-bait takes, and at 2,189 manholes poison takes were recorded. Prior to these treatments 359 manholes were test-baited, for the purpose of ascertaining what degree of re-infestation had taken place.

Defective drains with rat infestation were reported to the Chief Public Health Inspector in 110 cases, and appropriate action was taken.

Bristol, Avonmouth and Portishead Docks were systematically inspected, and where necessary, rodent control measure were carried out. The good effect of this work has been shown when large stacks of commodities have been removed from storage, as hardly any damage has been recorded.

It is of interest to note that during the year under review more industrial premises within the dock area requested the services of the Health Department for inspections and rodent control.

Assistance was given to occupiers in the destruction of wasps, and 69 nests were found and destroyed, although advice only was given in 35 cases as these were dealt with by the occupiers.

Eight instances of damage by badgers was reported, and appropriate action taken. The killing of poultry by foxes was notified on nine occasions, and in seven of these the "earths" were found and poison-gassed.

Under the *Pests Act, 1954*, eight cases of rabbit infestation were found or reported, chiefly on allotment-sites, and here again appropriate action was taken.

The total number of rats recovered from all sources were as follows:—

					1956		1955	
					Black Rat	Brown Rat	Black Rat	Brown Rat
City	..	..	..	..	211	127	111	138
Avonmouth	..	..	..	..	328	203	422	127
Portishead	..	..	..	..	—	—	—	—
Bristol	..	..	..	..	11	—	—	—
Total	..	..	..	..	880		798	

Rat Repression

No. of Complaints of Rats or Mice	Dealt with by Corporation	Dealt with by Occupier	No action required	Out- standing	
Out- standing 1955	Re- ceived 1956				
96	2,743	2,484	76	162	117
Bodies recovered from Premises					
Black Rats		Brown Rats		Mice	
211		127		75	
Docks area :—					
Bodies recovered :—		<i>Rattus rattus</i> (black)		<i>Rattus norvegicus</i> (brown)	
		328		203	
				Mice 30	

Rat Repression—Summary of work done during 1956

1955					1956			
Busi- ness Pre- mises	Dwell- ing Houses	Other	Total		Busi- ness Pre- mises	Houses	Other	Total
36 975	33 1,452	15 392	84 2,819	Complaints incompletely dealt with, brought for- ward Complaints received ..	45 986	27 1,316	24 441	96 2,743
1,011	1,485	407	2,903		1,031	1,343	465	2,839
933 15 18 45	1,281 45 132 27	374 — 9 24	2,588 60 159 96		941 14 27 49	1,104 62 131 46	439 — 4 22	2,484 76 162 117
1,011	1,485	407	2,903		1,031	1,343	465	2,839
1955					1956			
Avon- mouth	Bristol	Portis- head	Total		Avon- mouth	Bristol	Portis- head	Total
127 422 — — 33	— — — — —	— — — — —	127 422 — — 33	<i>Rats recovered:—</i> <i>Docks, quays, wharves,</i> <i>etc.:—</i> Brown Black Species not recorded .. Examined for plague Mice	203 328 — — 30	— — — — —	— — — — —	203 328 — — 30
			138 111 — 14 33					127 211 — 66 75

Disinfection and Disinfestation

Once again the Disinfecting Station has made a valuable contribution towards the prevention of disease and the promotion of health. The work performed by the staff of the station is positive in character and covers a wide field of preventive work.

Apart from the routine work of disinfection and disinfestation of premises and articles the functions of the station include facilities for vermin and scabies baths, collection of condemned food, drain testing, soiled linen collection, laundering and return service for cases being nursed at home, and assistance in the control work of animal diseases.

In this latter connection control measures following outbreaks of foot and mouth disease included regular disinfection of all trucks used for the transport of animals from infected areas, and in one case, disinfection of sheds on a farm. An outbreak of fowl pest was dealt with by employing

2. ADMINISTRATION OF THE SHOPS ACT, 1950 AND KINDRED LEGISLATION DURING 1956

E. G. H. Spencer

Chief Inspector, Shops and Young Persons (Employment) Acts

SHOPS ACT, 1950

General Administration

The year under review presented the Shops Inspectorate with more than the customary problems, and day to day administration was thus rendered extremely difficult. An abnormal amount of sickness and the resignation of Mr. M. A. L. F. Sergeant, who left to enter business on his own account in November, led to a substantial decrease in the number of visits effected.

Routine visits to premises subject to the provisions of the Act were some 3,000 less than the previous year, and revisits to ensure that infringements noted on earlier visits had been adjusted, were approximately 500 fewer. It is interesting to note, however, that there is a significant drop in the overall number of infringements reported, and this is not entirely attributable to a reduction in the number of visits. On the contrary, it rather suggests that the policy of maintaining regular visits is having the desired effect of preventing contraventions and ensures, as far as is practicable, that employees in the distributive trades are not denied the benefits conferred upon them by the Act. Advice on matters pertaining to the legislation is given to shopkeepers and employees alike, and a memorandum specially written by the Shops Act Section, giving details of the main provisions, is freely distributed. A detailed summary appears on page 48 showing the various types of infringements encountered, and the action taken.

Two prosecutions were necessary and the offenders were fined a total of £19 10s. Costs amounting to £1 10s. were imposed and each was required to pay an advocate's fee of £2 2s.

Exemption Orders

The following exhibitions were granted exemption from the general closing hours:—

- (i) That of the Bristol Aquarists' Society, held at Messrs. W. D. & H. O. Wills' Recreation Hall, Bedminster;
- (ii) Bristol Home, Trades and Industries Exhibition, Drill Hall, Old Market Street, Bristol;
- (iii) Bristol Horticultural and Chrysanthemum Society's 77th Annual Show, Drill Hall, Old Market Street;
- (iv) The City and County of Bristol Horticultural Show, Durdham Down.

An application for an exemption order in respect of an Ideal Homes Exhibition at the Victoria Rooms, from August 18th to September 1st, was considered by the Health Committee, but as the members were not satisfied that the main purpose was other than retail trade or business, it was resolved that no order be made.

Complaints

Once again the number of complaints shows an increase over the previous year. An upward trend is always related to the current economic situation and usually indicates keener trading conditions. Most of the

complaints concerned smaller shops keeping open after the prescribed closing hours, but complaints concerning assistants' welfare were approximately 50 per cent more than in 1955.

Observation Patrols

As in former years, members of the inspectorial staff were called upon to undertake duty outside of normal hours and the usual patrol was maintained on early closing days. Because of the increased number of complaints, Sunday duty was necessary on 28 occasions as opposed to 10 in the previous year.

The Gowers Report

In November, a Bill to replace some of the provisions of the existing Shops Act was published. This is based on the recommendations of the Committee of Enquiry under the chairmanship of Sir Ernest Arthur Gowers, G.B.E., K.C.B., and makes a number of changes in the law affecting Sunday trading; trading elsewhere than in shops; half-holidays and meal times for shop assistants; Sunday employment; and closing hours of shops on weekdays and Sundays.

It is proposed, among other things, that the Secretary of State shall prescribe articles of food and drink that may be sold for off-consumption after the general closing hours, and local authorities will be required to register shops where the sale of such refreshments forms a substantial part of the business carried on. A local authority may refuse or cancel a registration in certain circumstances and any person aggrieved by a decision of this nature may appeal to a magistrates' court.

There are to be similar provisions relating to the registration of shops permitted to open on Sundays.

If the proposed Shops Bill becomes law, the new act will substantially increase the work of the section and will necessitate additional clerical assistance and inspectorial staff, to deal with the additional responsibilities imposed upon local authorities. Apart from these new duties, it will be necessary to revoke some 32 local closing orders in force at present, and ascertain the views of shopkeepers before making new ones. Each shopkeeper affected is entitled to vote for or against a proposed order and local authorities must conduct a poll for this purpose.

The Association of Municipal Corporations has appointed a Special Sub-Committee, with a membership of twenty, to consider the provisions of the Shops Bill and the first meeting was held in London on the 6th December. Mr. E. G. H. Spencer is one of the two inspectors appointed to this committee.

Other Enactments

(a) *The Young Persons' (Employment) Act, 1938*

This Act regulates the hours of employment of persons under the age of eighteen years, employed in certain occupations outside the scope of the Shops or Factories Acts, or similar legislation. It applies, for example, to young persons employed in the collection or delivery of goods, or in carrying, loading or unloading goods; outdoor messengers; porters, page-boys and receptionists at residential hotels and clubs; employment at a place of public entertainment or swimming bath; at premises other than private houses in the operation of a hoist or lift connected with mechanical power; employment in connection with the operation of cinematograph apparatus, etc.

Seventy-six visits were made to premises where young persons were likely to be employed in any of the above categories and compliance with the provisions of the act was usually good. Only ten contraventions were observed and verbal warnings were given in each instance. No further infringements were noted on nine subsequent re-visits.

(b) *Employment of Women, Young Persons and Children Act, 1920*

The Health Committee is responsible for the enforcement of this act in so far as it restricts the night employment of young persons in industrial undertakings.

Transport of passengers or goods by road or rail is expressly defined as an industrial undertaking and two prosecutions were taken against the British Transport Commission, for employing persons under eighteen years of age at night, at local depots. The first case was taken in March, when a fine of £10 and £1 ls. costs was imposed, and the second was heard at Bristol Magistrates' Court in December. On the latter occasion the Magistrates imposed fines totalling £92 and ordered payment of £10 10s. costs.

(c) *The Sunday Entertainment Act, 1932*

Only two infringements of the conditions imposed by the licensing justices were observed and verbal warnings were given in both cases. Fifty-three visits and fourteen revisits were made to cinemas opening on Sundays.

Staff

At the end of December the staff consisted of: 1 chief inspector (male); 1 inspector (male); 1 clerk (male).

The section was thus two inspectors short of normal complement, due to the resignation of Mr. Sergeant after seventeen years' service in the Health Department, and the illness of Miss W. E. Waddell, which resulted in her being superannuated as from December 1st. The last named was appointed an inspector in 1939, but had unfortunately been off duty since August.

Annual Conference

The Vice-Chairman of the Health Committee, Councillor W. H. England, and the Chief Inspector, were appointed delegates of the Local Authority to the Annual Conference of the Institute of Shops Acts Administration. This was held at Scarborough in September, and was the first occasion that a member of the Committee had attended.

Acknowledgement

I would once again like to take the opportunity of thanking my colleagues for their continued loyal assistance and, in particular, Mr. G. P. Hooper, who deputises for me on many occasions.

Summary of Visits

1955		1956
	Shops Act, 1950	
	<i>Visits:—</i>	
8,755	Retail	6,057
353	Wholesale	182
	<i>Revisits:—</i>	
1,185	Retail	681
46	Wholesale	19
	<i>Infringements:—</i>	
836	Failure to exhibit notices	425
52	Half-holiday and compensatory holiday	29
14	Hours of young persons	13
33	Meal intervals	10
4	Seats for female assistants	5
933	Verbal warnings	462
5	Warning letters	17
1	Legal proceedings	2
501	Assistants' facilities—Referred to the Chief Public Health Inspector—Section 38	309
	Young Persons (Employment) Act, 1938	
108	Visits	76
11	Revisits	9
	<i>Infringements:—</i>	
2	Night employment and hours	2
—	Records	3
—	Meal intervals	3
1	Half-day and compensatory holiday	2
3	Verbal warnings	10
—	Warning letters	—
—	Legal proceedings	—
	Sunday Entertainment Act, 1932—Cinemas	
67	Visits	53
13	Revisits	14
—	<i>Infringements—(holidays)</i>	1
4	(records)	1
—	Verbal warnings	2
1	Reported to Licensing Justices	—
1	Legal proceedings	—
	Employment of Women, Young Persons and Children Act, 1920	
3	Visits	19
6	Revisits	5
	<i>Infringements:—</i>	
60/80	Night employment	170
—	Verbal warnings	—
1	Warning letters	—
—	Legal proceedings	2
	Inspectorial Staff—Work outside normal office hours	
38	Evenings	33
10	Sundays	28

3. THE REPORT OF THE PUBLIC ANALYST & OFFICIAL AGRICULTURAL ANALYST FOR THE CITY & COUNTY OF BRISTOL FOR THE YEAR 1956

(Incorporating the Work on Behalf of the County of Gloucester for the same Period)

E. G. Whittle B.Sc. (Lond.), F.R.I.C.

INTRODUCTION

The total examinations for the year amounted to nearly 8,000. With a full complement of trained staff this Laboratory could handle up to 10,000 samples, but during the year under review six members of an operative chemical staff of 17 left the service. Whilst the Department handled the samples submitted, it was necessary to curtail certain activities and investigations.

Miss E. E. Wilks had left in October, 1955, and Mr. D. J. Taylor was appointed as Second Assistant in January. No qualified successor could be found for the post vacated by Mr. Taylor until mid-year, when Miss M. V. Westcott, M.Sc., temporarily filled the vacancy whilst acquiring experience of the work. This she did to such good purpose that I was able to recommend her for the permanent post at the end of the year.

Mr. P. Havas, one of our spectroscopists, left at the end of the year to take up a senior appointment at Kingswood, and his place was taken on a temporary basis by Mrs. K. J. Noyes.

Among the eight Student Technicians we have had three changes. Miss A. P. McMullin left in May to take a course in Domestic Science in Gloucester and was succeeded by Mr. J. S. Wilson. Miss A. P. Freeman went to Harwell and Mr. A. C. Jacobs succeeded, and finally Mr. J. K. Faulkner secured an appointment at the Long Ashton Research Station and Mr. R. McKenna joined this staff. It is of interest to note that in my ten years as Public Analyst nearly 60 people have worked in the Department, and of these, 35 have been Student Technicians. Change and movement of the Staff are inevitable, but it is a sad and depressing thought that much potentially good material has been lost to the Public Analyst service. We train them but in face of strong monetary attractions outside the service we cannot hope to compete for their services.

Nevertheless, if and when any students acquire the Higher National Certificate in Chemistry with three years' laboratory experience, I am hoping to retain two individuals for promotion to Technicians. The establishment has recently been altered to permit of this.

In consequence of staff changes a greater burden of work has been thrown on the remaining members and I do wish to acknowledge the valuable help given in all our efforts to maintain the flow of work. In particular I would thank the Additional Public Analyst, Mr. Dembrey, and the First and Second Assistants, Mr. G. G. Fisher and Mr. D. J. Taylor. Once again also I must acknowledge with gratitude the invaluable help of my Secretary, Mrs. I. Hall. I commend her industry and cheerfulness in dealing with all the clerical matters.

Relationships with the Inspectors of both the Bristol and Gloucester County Authorities have been very happy and cordial throughout the year. I am sure all have benefited from our discussions of the perplexities of the Food and Drugs Act and other legislation, and I do thank them for their consideration, co-operation and understanding.

Finally, as Hon. Secretary of the Standards Committee of the Association of Public Analysts, I have had first-hand knowledge of difficulties encountered in Public Analyst work and have been able to give some assistance in the tasks of formulating standards of composition, codes of practice, and agreements.

The Report is divided into ten Parts as under:—

	Introduction;
	Summary of Examinations;
Part I	Food and Drugs Act;
Part II	Fertilisers and Feeding Stuffs Act;
Part III	Waters, Swimming Bath Samples, Effluents, Sewage, and Chlorination;
Part IV	Rag Flock Act;
Part V	Pharmacy and Poisons Act;
Part VI	Miscellaneous Analyses;
Part VII	Report on the work for the County of Gloucester;
Part VIII	Atmospheric Pollution;
Part IX	Spectroscopic Analyses;
Part X	Other Activities.

SUMMARY OF EXAMINATIONS

TABLE I Bristol

Milk	837
Food and Drugs	2,184
Waters, Swimming Baths	314
Fertilisers and Feeding Stuffs	162
Miscellaneous	806
Rag Flock Act	44
District Inspectors' Samples	27
Poisons & Pharmacy Act	9
Atmospheric pollution	—
Lead peroxide	132
Deposit gauges	96
Silica and phosphorus	36
Zinc and fluorine	23
Spectroscopic analyses	1,118
Chlorination visits and examinations	234
Control of water supplies	3
Smoke recordings for Port of Bristol Authority	337
TOTAL	6,362

TABLE 2 County of Gloucester

Milk	767
Food and Drugs	489
Waters	123
Fertilisers and Feeding Stuffs	72
Miscellaneous	22
Atmospheric pollution :—	
Lead peroxide	60
Deposit gauges	60
Poisons and Pharmacy Act	2
TOTAL	1,595

PART I. FOOD AND DRUGS ACT

New and Modified Legislation 1956

The following are new and amended regulations and recommendations which became operative during the year 1956.

1. *Revised Recommendations for Limits of Copper—20th January, 1956. Content of Foods—*

This Report was issued after consultations with trade and other interests. It was found convenient to recommend general limits for Cu for :—

- (a) Beverages;
- (b) Other foods;
- (c) A certain number of beverages and other foods to which the limits in (a) and (b) cannot at present be applied.
- (a) Beverages limit 2 p.p.m.
- (b) Other foods limit 20 p.p.m.
- (c)

<i>Article</i>	<i>Limit in p.p.m.</i>
(I) BEVERAGES:	
Wines, beer, cider, non alcoholic beverages prepared from cider and concentrated soft drinks (not including concentrates used in the manufacture of soft drinks) ..	7 p.p.m.
(II) OTHER FOODS:	
Chicory (dried or roasted) ..	30 p.p.m.
Cocoa powder	70 p.p.m. on fat free substance.
Coffee beans	30 p.p.m.
Colourings	30 p.p.m. on dry colouring matter.
Flavourings	30 p.p.m.
Edible gelatin	30 p.p.m. (already prescribed)
Pectin liquid	30 p.p.m.
Pectin solid	300 p.p.m.
Tea	150 p.p.m.
Tomato Ketchup	50 p.p.m. on total solids, but see amending order, item 5 below.
Tomato Purée, paste, powder, juice and cocktails	100 p.p.m. on dry tomato solids.
Yeast and yeast products ..	60 p.p.m. on dry matter.

Copper differs from other trace elements in that it plays an important part in animal and vegetable life, and it is therefore a necessary part of the diet and 1—2 mgm. daily is necessary. On the other hand, traces of copper take an active part in the catalytic oxidation of food, e.g., by imparting a tallowy taste to butter and milk, and causing destruction of Vitamin C.

Larger amounts of copper are astringent and irritating, although the existence of chronic copper poisoning has not been established.

The purpose of the recommendations is to protect the consumer against the sale of food with a copper content greatly in excess of the nutritional needs.

2. *The Milk and Dairies (Channel Islands and South Devon Milk) Regulations*

These regulations came into force on 1st July, 1956, and they require that all milk sold as Channel Islands, Jersey, Guernsey, or South Devon Milk shall contain not less than 4 per cent by weight of milk fat.

3. *Food Standards Committee Report on Sausages*

This report was approved for publication by the Ministers and examined the need for statutory control in the light of evidence from all branches of the sausage trade and other organisations concerned.

The following is a summary of recommendations:—

- (a) A minimum standard of meat content of 65 per cent for sausages made wholly or mainly with pork, and of 50 per cent of all other meat sausages.
- (b) The meat content to be restricted to bacon, ham, beef, pork, mutton, lamb, veal, edible offals (other than prohibited offals in uncooked open meat products under the *Meat Products Order, 1953, No. 246*), poultry, game, rabbit, hare, and venison.
- (c) The proportion of fat not to exceed 50 per cent by weight of the total meat content.
- (d) The standards to apply to uncooked sausages, chipolatas, and slicing sausages.
- (e) The sale of substandard sausages to be prohibited.
- (f) The standard to apply to sausages, etc., intended for sale by catering establishments.
- (g) As regards the use of the description "Pork Sausage" and "Beef Sausage" the majority of the Committee consider that that descriptions should apply where at least four-fifths of the meat content consists of the named meat, but certain members of the Committee consider that they should only apply where the meat content consists wholly of the named meat and that suitable alternative descriptions should be found for sausages containing up to one-fifth of other meat.

4. *The Food Standards (Curry Powder) (Amendment) Regulations, 1956*

These regulations came into force on the 2nd August and they amend the *Food Standards (Curry Powder) Order, 1949*, by raising the limit of lead present in curry powder from 10 p.p.m. to 20 p.p.m.

5. *The Food Standards (Tomato Ketchup) (Amendment) Regulations, 1956.*

These regulations came into force on the 2nd of August, 1956, and they amend the *Food Standards (Tomato Ketchup) Order, 1949*, by substituting for the limit of 50 parts copper per million parts of dried total solids in tomato ketchup, catsup, sauce or relish, a limit of 20 parts of copper per million parts of the tomato ketchup, catsup, sauce or relish as a whole as the case may be.

6. *The Flour (Composition) Regulations, 1956*

These regulations came into force on the 30th September, 1956, and prescribe compositional requirements as respects certain nutrients (iron, vitamin B₁, nicotinic acid, or nicotinamide) in all flour, and as respects creta praeeparata in all flour other than flour containing the whole of the products derived from the milling of wheat.

These regulations apply in relation to both imported and home produced flour, but they do not apply in relation to flour in its sale to the Minister for stock-piling or experimental purposes, to flour for the manufacture of concentrated preparation of nutrients, gluten starch, communion wafers or matzos, or to flour sold for export or for use in hospitals for the purposes of diagnosis, treatment or research.

Several were natural constituents of certain foods and were already common ingredients in food apart from their use as emulsifying or stabilising agents, and it was decided therefore that these substances could not be regulated. The remainder were considered in the light of pharmacological evidence and classified according to their possible health hazard.

Apart from natural constituents and common ingredients of foods, official approval should be restricted to the following substances:

1. Superglycerinated fats
2. Synthetic lecithin
3. Propylene glycol alginate
4. Propylene glycol stearate
5. Methyl cellulose
6. Methyl ethyl cellulose
7. Sodium carboxy methyl cellulose
8. Stearyl tartrate
9. Diacetyl tartaric acid esters of superglycerinated fats
10. Monostearin sodium sulphoacetate
11. Sorbitan esters of fatty acids

Provisions should be made to add other substances to the list.

Further, the report recommends that the addition of emulsifying and stabilising agents to milk should not be allowed, and that only (1) and (8) should be added to bread. Also there should be an extension of the prohibition of "thickening" substances in cream to cover reconstituted cream.

No labelling should be required with the above, but where the substances themselves are for sale, they should be labelled as being suitable for use in food.

There should be no need to specify limits, but it should be understood that the minimum quantity should be used to produce the desired effect of the agent.

Silicones should not be regarded as emulsifying and stabilising agents.

10. *Food Standards Committee Report on Processed Cheese and Cheese Spread*

The committee recommends that statutory minimum standards should be laid down to control the composition of processed cheese and cheese spread for the protection of the consumer.

The standards recommended are:

	<i>Minimum milk fat</i>	<i>Maximum Water</i>
Processed Cheddar or Cheshire Cheese	48 per cent on dry matter	42 per cent
Processed cheese	45 per cent on dry matter	45 per cent
Cheese spread	20 per cent on product as sold	60 per cent

The report also recommends that flavoured processed cheese and cheese spreads and the processed cheese or cheese spread constituent of mixtures should be required to conform to the appropriate standard and that the ingredients of the cheese spread should be required to be declared on the label.

TABLE 3
FOODS

Nature of Sample	Total Examined	Number adulterated or otherwise irregular
Milk	837	71
Almonds, ground and substitute	12	—
Almond paste and marzipan	10	—
Arrowroot	3	—
Angelica	2	—
Baking powder	8	—
Butter	22	—
Beans, butter	3	—
Bread	7	—
Beers and ales	48	—
Blancmange powder	14	—
Beetroot shreds	2	—
Biscuits.. .. .	6	—
Bay leaves	1	—
Bread crumbs	1	—
Bicarb. of soda	6	—
Buttered bread rolls, buns and scones	16	—
Chocolate cake coating	1	—
Cherries, glacé.. .. .	1	—
Coconut ice	1	—
Condensed milk	8	—
Cream, clotted, sterilised and double	42	—
Coffee, ground	7	—
Coffee and chicory and essence	28	—
Chewing gum	35	—
Cereal	2	—
Chocolate vermicelli	1	—
Cakes	25	—
Cheese, spreads and processed	30	—
Cornflour	9	—
Carrot strips	2	—
Cake mixture	12	—
Cake decorations	6	—
Cheese and tomato spread	1	—
Curry powder	12	—
Cocoa and drinking chocolate	8	—
Cooking fat	17	—
Cider	24	—
Colourings and flavourings	60	—
Custard powder	19	—
Caraway seeds.. .. .	2	—
Coconut, desiccated	3	—
Canned fruit	24	—
Canned fish	35	—
Canned soup and powder	27	—
Canned meat	13	—
Canned tomatoes	5	—
Cold mix custard powder	1	—
Celery seeds	1	—
Dried vegetables	10	—
Dried fruit	77	—
Dripping	7	—
Dried egg	1	—
Edifas	4	—
Egg custard with rice.. .. .	1	—
Essences	7	—
Farinoca	5	—
Flavoured milk	2	—
Fish and meat pastes.. .. .	45	—
Flour, plain and S.R.. .. .	35	—
Frying oil	1	—
Fresh fish—winkles, cockles, prawns	7	—

Nature of Sample							Total Examined	Number adulterated or otherwise irregular
Fish fingers and cakes	..	..	..	..	..	..	11	—
Fish dressing	..	..	..	..	..	..	1	—
Golden raising powder	..	..	..	..	..	..	9	—
Gelatin, powdered	..	..	..	..	..	..	12	—
Gravy browning and powder	..	..	..	..	..	..	16	—
Golden syrup	..	..	..	..	..	..	1	—
Ground figs	..	..	..	..	..	..	1	—
Gravy salt	..	..	..	..	..	..	1	—
Glacé fruits	..	..	..	..	..	..	9	—
Herbs, mixed	..	..	..	..	..	..	21	—
Honey	..	..	..	..	..	..	10	—
Haricot beans	..	..	..	..	..	..	4	—
Ice cream	..	..	..	..	..	..	146	5
Ice lollies	..	..	..	..	..	..	61	—
Jelly, cubes, crystals and powder	..	..	..	..	..	..	39	—
Instant whip	..	..	..	..	..	..	1	—
Jams, marmalade, curd, mincemeat	..	..	..	..	..	..	68	—
Jelly with fruit	..	..	..	..	..	..	1	—
Lard	..	..	..	..	..	..	24	—
Laverbread	..	..	..	..	..	..	1	—
Lemonade, powder and crystals	..	..	..	..	..	..	16	—
Lentils	..	..	..	..	..	..	1	—
Macaroni	..	..	..	..	..	..	5	—
Meat extracts	..	..	..	..	..	..	4	—
Meat products	..	..	..	..	..	..	36	—
Mint sauce	..	..	..	..	..	..	4	—
Milk powder	..	..	..	..	..	..	4	—
Margarine	..	..	..	..	..	..	34	—
Mustard	..	..	..	..	..	..	10	—
Mixed spice	..	..	..	..	..	..	13	—
Mixed peel	..	..	..	..	..	..	1	—
Nutmeg	..	..	..	..	..	..	1	—
Nuts	..	..	..	..	..	..	22	—
Nut paste	..	..	..	..	..	..	1	—
Oranges	..	..	..	..	..	..	3	—
Onion shreds	..	..	..	..	..	..	1	—
Oatmeal	..	..	..	..	..	..	2	—
Oats, rolled	..	..	..	..	..	..	2	—
Pearl barley	..	..	..	..	..	..	6	—
Pastries	..	..	..	..	..	..	6	—
Pineapple juice	..	..	..	..	..	..	1	—
Pickles and sauces	..	..	..	..	..	..	48	—
Pepper	..	..	..	..	..	..	15	—
Peeled plum tomatoes	..	..	..	..	..	..	1	—
Puff pastry mix	..	..	..	..	..	..	3	—
Potato crisps	..	..	..	..	..	..	3	—
Peel, candied	..	..	..	..	..	..	19	—
Rice	..	..	..	..	..	..	20	—
Rusks	..	..	..	..	..	..	1	—
Salad cream and mayonnaise	..	..	..	..	..	..	13	—
Semolina	..	..	..	..	..	..	5	—
Soft drinks	..	..	..	..	..	..	48	—
Sweets and liqueur chocolates	..	..	..	..	..	..	55	—
Suet	..	..	..	..	..	..	10	—
Sausages, pork, beef	..	..	..	..	..	..	67	—
Savoury spread	..	..	..	..	..	..	1	—
Stuffing	..	..	..	..	..	..	23	—
Sago	..	..	..	..	..	..	2	—
Spirits	..	..	..	..	..	..	76	—
Sugar and icing sugar	..	..	..	..	..	..	18	—
Salt	..	..	..	..	..	..	13	—
Sandwich spread	..	..	..	..	..	..	1	—
Salted peanuts	..	..	..	..	..	..	1	—
Tea	..	..	..	..	..	..	21	—
Tapioca	..	..	..	..	..	..	7	—

Nature of Sample							Total Examined	Number adulterated or otherwise irregular
Vinegar, non-brewed	condiment and malt	..	..	..	..	..	38	2
Welsh relish	..	..	..	..	..	..	1	—
White edible oil	..	..	..	..	..	..	1	—
Wines	..	..	..	..	..	..	2	—
Yeast	..	..	..	..	..	..	2	—
							2,787	78

DRUGS

Algesal Balm Salicylate	..	..	..	..	..	..	1	—
Ammoniated Tincture of Quinine	..	..	..	..	..	..	9	1
Aspirins	..	..	..	..	..	..	5	—
Anadin tablets	..	..	..	..	..	..	1	—
Antigerm ointment	..	..	..	..	..	..	2	2
A.P.C. tablets	..	..	..	..	..	..	1	—
Aneurin tablets	..	..	..	..	..	..	1	—
Aneurin Vit. B. tablets	..	..	..	..	..	..	1	—
Bile ovals	..	..	..	..	..	..	1	—
Blackcurrant juices	..	..	..	..	..	..	2	—
Boracic powder	..	..	..	..	..	..	3	—
Basilicon ointment	..	..	..	..	..	..	1	—
Burn dressing	..	..	..	..	..	..	1	—
Balsam of aniseed	..	..	..	..	..	..	2	—
Biladine tablets	..	..	..	..	..	..	1	—
Children's aspirins	..	..	..	..	..	..	1	—
Codein tablets	..	..	..	..	..	..	2	—
C. T. Pyrim cold and influenza tablets	..	..	..	..	..	..	1	—
Castor oil	..	..	..	..	..	..	6	—
Citrose	..	..	..	..	..	..	1	—
Camphorated oil	..	..	..	..	..	..	9	—
Chlorophyll tablets	..	..	..	..	..	..	1	—
Cough mixture	..	..	..	..	..	..	1	—
Cod liver oil and malt	..	..	..	..	..	..	2	—
Cascara sagrada	..	..	..	..	..	..	1	—
Calamine lotion	..	..	..	..	..	..	1	—
Camphorated chalk	..	..	..	..	..	..	3	—
Chloros	..	..	..	..	..	..	1	—
Dettol	..	..	..	..	..	..	1	—
Dextrosal glucose tablets	..	..	..	..	..	..	1	—
Eye lotion	..	..	..	..	..	..	3	—
Epsom salts	..	..	..	..	..	..	1	—
Eucalyptus ointment	....	..	..	..	..	..	6	—
Fuller's earth	..	..	..	..	..	..	2	—
Friars Balsam	..	..	..	..	..	..	5	—
Fenning Fever Mixture	..	..	..	..	..	..	1	—
Fergusade	..	..	..	..	..	..	1	—
Formamint	..	..	..	..	..	..	1	—
Glycerine of Borax	..	..	..	..	..	..	1	—
Glycerine	..	..	..	..	..	..	2	—
Gee's Linctus	..	..	..	..	..	..	1	—
Golden Eye Ointment	..	..	..	..	..	..	1	—
Glucose chocolate centre barley sugar sweets	..	..	..	..	..	..	1	—
Glucose barley sugar sweets	..	..	..	..	..	..	1	—
Halibut oil capsules	..	..	..	..	..	..	2	—
Hydrogen peroxide	..	..	..	..	..	..	7	2
Health salts	..	..	..	..	..	..	1	—
Iron tablets	..	..	..	..	..	..	1	—
Iodine	..	..	..	..	..	..	16	2
Indigestion tablets and mixture	..	..	..	..	..	..	2	—
Koray tablets	..	..	..	..	..	..	1	—
Kwells	..	..	..	..	..	..	1	—
Lucozade	..	..	..	..	..	..	2	—
Liquid paraffin	..	..	..	..	..	..	1	—
Liquid apples	..	..	..	..	..	..	1	—

Nature of Sample	Total Examined	Number adulterated or otherwise irregular
Liquorice powder	2	—
Laxative chewing gum	1	—
Lysol	1	—
Malt preparations	2	—
Mustard ointment	1	—
Noctynol insomnia tablets	1	—
Orange squash	1	—
Olive oil	5	—
Oil of spike lavender	1	—
Orange sulphur tablets	2	—
Phenacetin tablets	5	—
Phenolphthalein tablets	2	—
Potassium bromide tablets	1	—
Parrish's food	1	—
Phenol ointment	1	—
Phul Nana cachous	1	—
Pure glycerine B.P.	1	—
Relaxing tablets	1	—
Real juice of lemon	1	—
Sal Volatile	12	—
Sulphur of lime juice tablets	1	—
Sulphur tablets	1	—
Sereen travel tablets	1	—
Shampoo with egg	2	—
Suntan cream	5	—
Skin cream	5	—
Senna granules	1	—
Syrup	1	—
Seidlitz powder	1	—
Syrup of figs	1	—
Syrup of cinnamon quinine	1	—
Saccharin tablets	4	—
Saxin tablets	1	—
Sulphur tablets and cream of tartar	1	—
Throaties cough sweets	3	—
Tincture of iodine B.P.	1	—
Tincture of quinine	1	—
Travel sickness tablets	3	—
Turtle oil beauty mask	1	—
Tooth pastes	9	—
Teething jelly	1	—
Tonic strengthening pills	1	—
Veganin tablets	3	—
Vaseline petroleum jelly	1	—
Vitamin B. tablets	2	—
Witch hazel B.P.C.	1	—
Yeast Vite	2	—
Yeast tablets	6	—
Zinc and castor oil cream	4	—
Total of drugs	234	7
Total of foods and milk	2,787	78
TOTAL	3,021	85

TABLE 4

	1952	1953	1954	1955	1956
Total No. of samples	2,524	2,750	2,750	3,179	3,012
Milks per cent adulterated ..	8.09	4.67	8.43	5.52	8.48
Foods (other than milk) per cent adulterated	1.34	0.89	0.36	0.35	0.36
Drugs per cent adulterated ..	1.60	1.18	2.42	0.77	2.99
Total per cent adulterated ..	3.21	1.64	2.65	1.26	2.81

**TABLE 5 Average Composition of Genuine Milks for 1956
Bristol**

Month	No. of samples	Fat % average	Non-fatty solids % average
January	36	3.69	8.41
February .. .	24	3.80	8.72
March	20	3.88	8.87
April	52	3.84	9.02
May	26	3.61	9.02
June	89	3.66	8.91
July	96	3.70	8.81
August	64	3.65	8.67
September	76	3.81	8.80
October	94	3.61	8.71
November	118	4.49	9.13
December	61	4.14	8.82
Total	756	3.82	8.82

Gloucester

Month					No. of samples	Fat % average	Non-fatty solids % average
January	..	..	..	..	31	3·74	8·65
February	..	..	..	..	30	3·66	8·91
March	..	..	..	..	118	3·67	8·57
April	..	..	..	..	50	3·88	8·60
May	..	..	..	..	57	3·61	8·82
June	..	..	..	..	65	3·76	8·92
July	..	..	..	..	61	3·60	8·73
August	..	..	..	..	30	3·58	8·69
September	..	..	..	..	88	3·91	8·80
October	..	..	..	..	44	3·93	8·97
November	..	..	..	..	66	4·14	9·16
December	..	..	..	..	61	3·88	8·90
Total	..	..	..	..	701	3·78	8·81

Adulterated Milks and Action taken

No.	Commodity	For I	Nature of Deficiency or Irregularity	Action taken
V. 21	Milk	Informal	15.3 per cent added water	Formal samples taken—see V.33-42 below.
22	"	"	"	
23	"	"	"	
24	"	"	"	
25	"	"	"	
26	"	"	"	
27	"	"	"	
28	"	"	"	
33	Milk	Formal	10.6	
34	"	"	15.3	
35	"	"	14.7	Details referred to Town Clerk, who, having regard to the circumstances, decided not to prosecute but to issue a warning letter.
36	"	"	12.4	
37	"	"	10.0	
38	"	"	7.6	
39	"	"	12.4	
40	"	"	15.3	
41	"	"	10.0	
42	"	"	16.5	
59	Milk	Formal	8.3 per cent deficient in fat	
43	Milk	Formal	Channel Island fat	Bulk fat V.52-59 was 3.9 per cent. Satisfactory—No action.
44	"	"	4.35 per cent	
45	"	"	3.60	
46	"	"	3.70	
47	"	"	3.00	
48	"	"	3.55	
49	"	"	4.70	
	"	"	5.00	
52	"	"	4.50	
53	"	"	3.50	
54	"	"	3.50	Bulk fat was 3.90 per cent (V.52-59)
55	"	"	3.60	
56	"	"	3.95	
57	"	"	4.85	
58	"	"	4.15	

Ministry of Agriculture, Fisheries and Food informed by letter.

No.	Commodity	F or I	Nature of Deficiency or Irregularity	Action taken
V. 63	Milk	Informal	25.0 per cent deficient in fat and abnormal N.F.S. at 8.4 per cent.	Bulk fat V.63-64 was 3.0 per cent. Satisfactory—No action.
91	"	"	6.6 per cent deficient in fat	Bulk fat V.90-95 was 3.38 per cent. Satisfactory—No action.
94	"	"	6.6 " " "	
116	"	"	Channel Island fat 4.90 per cent	
117	"	"	4.15 " "	
118	"	"	" " " "	
119	"	"	" " " "	
120	"	"	" " " "	
121	"	"	" " " "	
122	"	"	" " " "	
123	"	"	" " " "	
129	"	"	5.0 per cent deficient in fat	Bulk fat V.116-123 was 4.0 per cent. Satisfactory—No action.
134	"	"	30.0 " " "	Bulk fat V.124-131 was 3.5 per cent. Satisfactory—No action.
138	"	"	6.6 " " "	Bulk fat V.132-137 was 3.2 per cent. Satisfactory—No action.
152	"	"	6.6 " " "	Producer informed and repeat sample taken—satisfactory.
164	"	"	18.3 " " "	Bulk fat V.150-152 was 3.0 per cent. Satisfactory—No action.
168	"	"	11.6 " " "	Bulk fat V.164-174 was 3.3 per cent. Satisfactory—No action.
175	"	"	Poor quality fat 2.9 per cent.	Bulk fat V.175-178 was 3.3 per cent. Satisfactory—No action.
178	"	"	6.6 per cent deficient in fat	Bulk fat X.20-23 was 3.45 per cent. Satisfactory—No action.
X. 22	"	"	10.0 " " "	Bulk fat X.24-25 was 3.05 per cent. Satisfactory—No action.
24	"	"	6.6 " " "	Ministry informed by letter, also producer informed. Re-sampled 20.7.56.
26	"	"	Channel Island fat 3.8 per cent	Bulk fat Z.26-30 was 3.6 per cent. Satisfactory—No action.
27	"	"	" " " "	Re-sampled; see Z.49-59 below.
28	"	"	Poor quality fat 2.9 per cent	
45	"	Formal	8.2 per cent added water	

ADULTERATED MILKS AND ACTION TAKEN—continued

No.	Commodity	F or I	Nature of Deficiency or Irregularity			Action taken
Z. 49	Milk	Formal	2.4 per cent added water	} Bulk fat Z.47-53 was 3.0 per cent	}	Reported to Town Clerk for legal proceedings. Case to be heard 27.8.56
50	"	"	7.6 "			
53	"	"	6.5 "			
55	"	"	16.5 "	}	}	Bulk fat Z.60-62 was 3.4 per cent. Satisfactory—No action.
56	"	"	24.1 "			
59	"	"	Fat only 2.95 per cent			
62	"	Informal	Poor quality fat 2.9 per cent			
V. 180	Milk	"	Channel Island fat only 3.75 per cent	}	}	Bulk fat V.179-V.186 was 3.88 per cent. Letter sent to producer.
181	"	"	" " " 3.35 "			
183	"	"	" " " 3.65 "			
184	"	"	" " " 3.65 "	}	}	Bulk fat V.191-V.194 was satisfactory.
186	"	"	" " " 3.25 "			
194	"	"	13.3 per cent deficient in fat			
220	"	"	15.0 "	}	}	Bulk fat V.220-V.228 was 4.0 per cent. Satisfactory.
222	Milk (Channel Island) Formal	"	5.0 "			
226	"	"	20.0 "			
227	"	"	12.5 "	}	}	Bulk fat V.241-V.246 was 3.4 per cent. Satisfactory.
241	"	Informal	6.6 "			
245	"	"	20.0 "			
249	"	Formal	5.0 per cent deficient in fat. N.F.S. 8.25 per cent. Suspicious. Trace of water	}	}	Bulk fat V.247-V.251 was 3.35 per cent. Letter sent.
258	"	Informal	53.3 per cent deficient in fat			
273	"	"	2.95 " fat only			
277	"	"	10.0 " deficient in fat	}	}	Bulk fat V.274-V.282 was 3.4 per cent. Satisfactory.
281	"	"	13.3 "			
284	"	"	2.95 " fat only			
291	Milk (Channel Island)	"	10.0 " deficient in fat	}	}	Bulk fat V.289-V.291 was 5.3 per cent. Satisfactory.
31	"	"	7.5 "			
34	"	"	15.0 "			
39	"	"	6.6 "	}	}	Bulk fat W.29-W.36 was 4.54 per cent. Satisfactory.
			" " "			
			" " "			
			" " "	}	}	Bulk fat W.37-W.43 was 3.57 per cent. Satisfactory.
			" " "			
			" " "			

ADULTERATED MILKS AND ACTION TAKEN—continued

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No.	Commodity	F or I	Nature of Deficiency or Irregularity		Action taken
W. 44	Milk	Informal	8.3 per cent deficient in fat		Bulk fat W.44-W.45 was 2.94 per cent. Re-sampled W.54/55.
46	"	"	5.0 " " "	"	Bulk fat W.46-W.47 was 3.17 per cent. Satisfactory.
X. 59	"	"	6.6 " " "	" N.F.S. 7.8 per cent	Repeat samples of batch taken. X.67-X.71 q.v.
63	Milk (Channel Island)	"	7.5 " " "	}	Repeat samples taken 26.7.56.
64	" "	"	3.7 " " "		X.65-X.66 q.v.
65	" "	Formal	6.2 " " "		Bulk fat X.65-X.66 was 4.0 per cent. Satisfactory.
68	"	"	5.0 " " "	}	Bulk fat X.67-X.71 was 3.17 per cent.
70	"	"	10.0 " " "		Letter sent.
88	"	Informal	15.0 " " "		Repeat sample not available—supply diverted.
90	"	"	13.3 " " "	}	Bulk fat X.89-X.91 was 3.27 per cent. Satisfactory.
98	"	"	8.3 " " "		Bulk fat X.96-X.98 was 3.0 per cent. Satisfactory.
Z. 73	Milk	Informal	6.6 per cent deficient in fat		Bulk fat Z.73-Z.79 was 3.27 per cent. Satisfactory.
76	"	"	20.0 " " "	}	Bulk V.328-336 was satisfactory.
V. 335	"	"	Fat only 2.90 per cent		Bulk V.358-362 was satisfactory.
V. 361	"	Formal	" " 2.90 " "		Warning letter to producer sent.
V. 369	Milk (Channel Island)	Informal	" " 3.30 " "	}	Resampled 16 Nov. 1956 (V.379 satisfactory).
V. 376	" "	"	" " 3.40 " "		Bulk V.387-389 was 4.30 per cent.
V. 371	"	"	" " 3.80 " "		Bulk V.423-429 was 3.30 per cent.
V. 388	"	"	" " 3.40 " "	}	Bulk V.430-431 was 4.20 per cent.
V. 428	"	"	" " 2.90 " "		Bulk V.438-439 was 4.10 per cent.
V. 430	"	"	" " 3.30 " "		Bulk X.119-121 was 3.16 per cent.
V. 439	"	"	" " 3.90 " "	}	Bulk only 3.50 per cent. Warning letter to producer sent.
X. 121	"	"	" " 2.70 " "		Bulk only 3.70 per cent. Warning letter to producer sent.
X. 154	"	"	" " 3.90 " "		
X. 155	"	"	" " 3.20 " "	}	
X. 164	"	Formal	" " 3.95 " "		
X. 165	"	"	" " 3.50 " "		

Food and Drugs—Adulterated—Action taken

No.	Commodity	Formal or Informal	Nature of Deficiency or Irregularity	Action taken
VD 15	Treacle	Informal	Mouse excreta around lid	Remaining stock examined and found to be satisfactory
VD 114	Balsam of Aniseed	"	Poor quality. Low in acetic acid	Stock destroyed
YD 6	Parrish's Food	"	Old stock. Considerable separation	Stock destroyed
YD 31 } 32 }	Antigerm Ointment " "	"	{ Only 5.30 per cent of zinc oxide against a declared 8 per cent	Stock destroyed. YD.383 in December
YD 57	Indigestion mixture	"	Old stock. Considerable separation	Stock exhausted
ZD 31	Strawberry jam	"	Poor quality. Total soluble solids 67.2 per cent	Two repeat samples found to be satisfactory
ZD 48	Seed Tapioca	"	Rodent excreta present	Stock disposed of
VD 175	Ice Cream	"	20.0 per cent deficient in sucrose	In each case a repeat sample was taken and found to be genuine
VD 177	" "	"	14.0 " " " "	
XD 52	" "	"	25.0 " " " "	
XD 53	" "	"	42.0 " " " "	
XD 55	" "	"	32.0 " " " "	
YD 93	Tincture of Iodine	"	12 per cent excess of iodine and 14 per cent excess of potassium iodide	Repeat sample taken and found to be satisfactory
YD 100	Ammoniated Tincture of Quinine	"	53.6 per cent excess of quinine	Old stock destroyed. New stock sampled
YD 126	Tincture of Iodine	"	5.0 per cent deficient in iodine	Repeat sample taken
YD 268 } XD 183 }	Non-brewed condiment Vinegar	Formal "	{ 7.5 per cent deficient in acetic acid Proved to be a non-brewed condiment. Also 15.0 per cent deficient in acetic acid	{ Both samples manufactured by same firm. Advised of Analyst's reports. Vendor XD.183 warned by letter. Repeat samples XD.220, 221, 222 taken. Satisfactory

FOOD AND DRUGS—ADULTERATED—ACTION TAKEN—continued

No.	Commodity	Formal or Informal	Nature of Deficiency or Irregularity	Action taken
VD 562	Buttered Rolls	Informal	Fat all margarine	Warning letters sent to all cafe proprietors concerned
VD 563	"	"	60 per cent butter	
VD 564	"	"	Margarine with 10 per cent butter	
VD 569	Bread & Butter	"	" " "	
VD 570	Buttered Rolls	"	Fat all margarine	
VD 571	"	"	50 per cent butter	
VD 572	"	"	85 " " "	
VD 573	"	"	35 " " "	Letters sent to retailers. Stocks destroyed
YD 216	Camphorated Chalk	"	Only 7.3 per cent camphor B.P.C. required 10 per cent	
YD 217	"	"	Only 3.2 per cent camphor B.P.C. required 10 per cent	
YD 217	"	"	Only 0.8 per cent camphor B.P.C. required 10 per cent	
YD 236	Ammon. Tincture of Quinine	"	Only 0.5 per cent ammonia B.P. required 1.0 per cent	Letter sent to retailer
YD 202	Hydrogen peroxide	"	.003 per cent w/v H_2O_2	Repeat sample taken (YD.237). Letter sent to retailer. Stock withdrawn
YD 237	"	"	.270 per cent w/v H_2O_2	

Comment on Other Foods and Drugs, Found to be Infested, of Poor Quantity, etc.

No.	Commodity	Formal or Informal	Nature of Deficiency or Irregularity	Comment
XD 26	Pork sausage	Informal	More than 60.0 per cent of the total meat was fat.	No standard—no action
XD 27	Pork sausage meat	"	Poor quality. Only 61.0 per cent meat	" " "
ZD 86	Pork sausage	"	Poor quality, only 60.0 per cent meat	" " "
ZD 90	Pork sausage	"	Poor quality, only 63.0 per cent meat	" " "
VD 119	Tonic Strengthening Pills	"	Poor quality. Phenacetin low	No action
XD 73	Pork sausages	"	Poor quality. Only 51.0 per cent meat	No standard—no action
XD 69	Butter-Crunch	"	Poor quality. Only 2.5 per cent butterfat	No action
WD 242	Cream	"	Fat 41.0 per cent	Repeat sample WD.339—satisfactory
WD 310	Pork sausages	"	Meat content 59.3 per cent	No standard—no action
WD 311	Pork sausages	"	Meat content 61.4 per cent	" " "
XD 206	Ice cream "100 per cent"	"	All fat was butter fat, but exception taken to description "100 per cent" dairy product	Manufacturers agreed, after representations by Town Clerk, to delete reference to "100 per cent" on their printed matter
XD 210	Dairy product	"		Stock in machine renewed
YD 180	Bubble-gum	"	In poor condition. Probably wetted by rain-water	
VD 384	Oranges canned	"	Tin content 1 1/2 gr./lb.	
VD 391	Beetroot shreds	"	Poor on reconstitution	Samples taken from school kitchen.
VD 392	Carrot strips	"	Poor on reconstitution	Stocks disposed of
VD 395	Ice wafers	"	Sample in "soggy" state	
VD 518	Cream Doughnuts	Informal	No butterfat	
VD 519	" Buns	"	" "	
VD 520	" "	"	" "	
VD 522	" "	"	" "	
VD 523	" "	"	" "	
VD 524	" Doughnuts	"	" "	
VD 527	" Buns	"	" "	
VD 528	" "	"	" Possibly 5.0 per cent butter	Reported to Town Clerk for legal opinion
VD 529	" "	"	" 5.0 " "	
VD 530	" "	"	" 15.0 " "	
VD 531	" Doughnuts	"	No butterfat	

COMMENT ON OTHER FOODS—continued

No.	Commodity	Formal or Informal		Nature of Deficiency or Irregularity	Comment
		Formal	Informal		
VD 550	Crystallised Fruits	Informal		Not true crystallised fruits. No real fruit present. Artificial or imitation preparations of sugar, gelatin, colouring and flavouring and citric acid	No available evidence that these were sold as "fruits." No action possible on these samples
VD 551	"	"			
VD 552	"	"			
VD 553	"	"			
VD 555	"	"			
VD 556	"	"			
VD 557	"	"		Requires statement of amount of proof spirit	Letters sent to retailers and importers. Will be correctly labelled in future
VD 584	Edelweis Liqueur	"			
WD 358	Butter Cream Toffees	"		Less than 1.5 per cent butter	Code of Practice only—Manufacturer informed by retailer
WD 433	Canned herrings and tomato	"		Contained approx. 3 gr/lb. tin	Repeat samples taken
WD 436	Canned brisling	"		Contained approx. 3 gr/lb. tin	
WD 444	Canned anchovies	"		Contained approx. 3 gr/lb. tin	
WD 550	Rum	Formal		Only 64.0 per cent proof spirit	Letter to importers 14 Jan., 1957
XD 231	Ice Cream	Informal		Poor quality—sugar low	
XD 236	"	"		"	Repeat samples taken
XD 304	Cream Buns	Informal		No butterfat	
XD 305	" Doughnuts	"		"	Reported to Town Clerk for legal opinion
XD 307	"	"		"	
XD 308	" Buns	"		"	
XD 310	" Doughnuts	"		"	
YD 189	Tincture of Iodine	"		Excess KI and iodine	
YD 234	"	"		Slight excess KI and iodine	Repeat sample taken (YD.234)
ZD 457	Rum	Formal		Proof spirit just at 65.0 per cent	"Not of serious consequence," but vendor informed by letter
XD 318	Pork sausages	Informal		40.0 per cent of fat and 25.0 per cent of lean meat	Satisfactory. No action
					No standard, and hence regarded as satisfactory

Abnormal Milks

Fifty-eight samples of milk gave solids-not-fat figures below the presumptive 8.5 per cent standard. The figures ranged from 6.78 to 8.45 per cent and included two Channel Island milks with solids-not-fat figures of 7.85 and 8.25 per cent. A series of six samples gave figures of 6.78, 6.90, 7.97, 7.47, 7.48 and 7.90 per cent, but regrettably only a few millilitres of the samples were submitted after preliminary bacteriological examination and the amounts were insufficient for the Hortvet Test. In all other cases the samples had normal freezing points with two exceptions, V.61, N.F.S. 8.25 per cent and freezing point minus 0.528°C, and V.247, N.F.S. 8.10 per cent and freezing point minus 0.523°C.

Details of legal action taken

<i>Case</i>	<i>Legal Action</i>
Mouse droppings on beef steak pie	Fined £25, plus £3 3s. costs
Metal in margarine	Fined £20
Bun containing nail	Fined £10 plus £3 3s. costs
Extraneous matter (card) in milk	Fined £3 3s. plus costs
Added water to milk	Fined £5 on each of five counts plus £3 3s. costs
Added water to milk	Absolute discharge (related to above case)
Metal in lard cake	Fined £5 plus £2 2s. fees and 1/8d. costs
Wire in bread	Fined £5 plus £2 2s. fees
Nail in fritter	Fined £5 plus £2 2s. costs
Nail in fruit loaf	Fined £5 plus £2 2s. costs
Glass in bread	Fined £5 plus £2 2s. costs
Mouldy pie	Both partners fined £2 plus £1 1s. costs (total £6 2s.)
Dirty milk bottle	Fined £5 plus £1 1s. costs
Dirty milk bottle	Fined £5 plus £1 1s. costs
Mouldy pie	Fined £5
Metal in Congress cake	Fined £15 plus £2 2s. costs

A glance down the column of articles submitted under the heading of "Drugs" shows quite clearly the signs of the times. We have first of all a selection of the "known, admitted and approved" remedies—*aspirin*, *codein* tablets, *friar's balsam*, *tincture of iodine*, etc., which are in fairly constant use in the average household and indeed occupy a proper place there.

Then there are the vitamin preparations calculated to put new life into the most jaded person, who then goes berserk and by dint of unrestrained eating, drinking and merriment becomes a candidate for the various indigestion remedies which are available in great quantity and variety.

He may, on the other hand, find himself in such a state as to require one or other of the relaxing or tranquillising drugs which abound, or his energies may be directed to reading advertisements which may convince him that true health and happiness are only possible of attainment either by washing out his colon with "health salts" at regular intervals or irritating it by various anthraquinone compounds in the shape of the many laxatives which are available.

One advertisement shows a complete happy family all with smiling faces and sparkling eyes, and, one infers, with radiant health, and all this

has been acquired by a daily evacuation, assisted, of course by the laxative which the picture is advertising.

If he desires to travel, he may, if he wishes to avail himself of the transport system of this City or of the British Railways, purchase tablets containing a central nervous sedative which will enable him to withstand the rigours of a journey from, say the Clifton Down to Temple Meads Station with comparative equanimity.

Should he—despite all the advantages that modern civilisation offers him—decide to fall ill—there is a sovereign remedy available for him. It is called a “fever cure” and contains, among other things, dilute nitric acid and dragon’s blood (suitably designated in dog-latin on the label). This article appears to be a fugitive from the Victorian era, and it would be pertinent to point out that in those days, dragon’s blood had another use—as a constituent of the coloured varnish that adorned some of the “mahogany” furniture.

In the fleeting moments which are very occasionally available for reflection, it occurs to the Analyst that there is a great deal of truth in the statement that we are fearfully and wonderfully made.

It is an undoubted fact that in spite of the availability of a welter of pills, powders and potions for all the ills that beset mankind, the expectation of life is increasing. This is probably a tribute to the resilience of the human body, but the Analyst may possibly be excused if he wonders at random moments whether he is wasting at least some of his time!

PART II. FERTILISERS AND FEEDING STUFFS ACT

TABLE 6 Summary of Samples Examined

		<i>Formal</i>	<i>Informal</i>	<i>Irregular</i>
Bristol:				
Feeding stuffs	..	33	21	8
Fertilisers	.. ..	23	70	23
Avonmouth:				
Feeding stuffs	..	15	—	1
		—	—	—
		71	91	32
		—	—	—
Gloucester:				
Feeding stuffs	..	33	18	4
Fertilisers	.. ..	5	16	5
		—	—	—
		38	34	9

TABLE 7

<i>Serial No. F. & F.</i>	<i>Article</i>	<i>Formal or Informal</i>	<i>Nature of Irregularity</i>	<i>Observations</i>
12	Bone meal	Informal	Nitrogen outside limits of variation	Formal repeat sample taken
16	Bone meal	"	Article requires statutory statement	Copy Analyst's report and letter sent
22	Sangral	"	Total phosphate outside combined limit	Repeat sample taken (F.F.57)
23	"Green Finger" Plantoids	"	Satisfactory, but insufficient sample for Sol. Phosphoric acid	" " " (F.F.76)
24	"Fertiloids"	"	Potash somewhat high	"Not to prejudice of purchaser"—No action
26	Bone meal	"	No statutory statement supplied	Letter sent
43	Bone meal	"	Excess of Phosphoric acid	Copy Analyst's report sent
44	Seamus Top Dressing	Formal	Nitrogen and Sol. Phosphoric Acid outside limits of variation	" " " "
45	Seamus General Mixture	"	Nitrogen and Insol. Phosphoric Acid outside limits of variation	" " " "
46	Sow & Weaner Meal	"	Slight excess of oil	" " " "
53	Seamus Plant Food	"	Nitrogen, Potash and Insol. Phosphoric acid outside limits of variation	" " " "
56	Tomato Fertiliser	Informal	Insol. Phosphoric acid outside limits of variation	" " " and letter sent
57	Sangral	"	Satisfactory, but insufficient sample for Sol. Phosphoric acid	Repeat sample taken (F.F.77)
58	Layers Mash	"	No statutory statement supplied	Letter sent
64	Lime	"	No statutory statement supplied	" "
69	Bone Meal	"	Insol. Phosphoric acid outside limits of variation	Copy Analyst's report and letter sent
70	Baby Chick Mash	"	No statutory statement supplied	" " " "
74	Layers Mash	"	No statutory statement supplied	" " " "
79	7.13.7	Formal	Nitrogen 30.0 per cent deficient	Repeat sample taken (F.F.106)

TABLE 7—continued

Serial No. F. & F.	Article	Formal or Informal	Nature of Irregularity	Observations
88	Bone meal	Formal	Nitrogen and phosphate both slightly in excess	"Not to prejudice of purchaser," but copy Analyst's report sent
92	Plantoids	Informal	Excess of insoluble phosphate	"Not to prejudice of purchaser"—No action
95	Bone Meal	"	Nitrogen slightly high	" " " " " "
102	"	"	No statutory statement supplied	Copy of Analyst's report and letter sent
104	Blood, fish and bone meal	"	Nitrogen high at 8.1 per cent	" " " " " "
109	Bran	"	No statutory statement supplied	" " " " " "
116	Garden lime	Formal	" " " "	Wholesalers and manufacturers informed of responsibilities—final letters sent
117	Baby Chick Crumbs	"	" " " "	Visited and warned
125	Layers Pellets	Informal	Oil 1.4 per cent only, against declared 3.25 per cent	Copy of Analyst's report and letter sent to retailer
123	Growmore Fertiliser	"	Insol. P_2O_5 high	"Not to prejudice of purchaser"—No action
130	Bone meal	Formal	P_2O_5 high	" " " " " "
135	Poultry Fattening Meal	"	Albs. slightly high	" " " " " "
3A/56	Dairy Mixture	"	Protein outside limits of variation	No action

PART III. WATER ANALYSIS AND SEWAGE

TABLE 8

Bristol

City water from tap at Canynge Hall	26
City water from pumping station, Knowle	13
Downend and Frenchay Hospital (West Glo'ster supply)	20
Wells and springs	11
Seepage, sewage effluents and streams	14
Ships in port	13
City mains supply (private houses, etc.)	21
Council House (heating system)	79
Swimming bath waters	116
Miscellaneous	1
	<hr/> 314 <hr/>

TABLE 9

	Bristol Supply		West Gloucester Supply
	Tap at Canynge Hall	Tap at Jubilee Rd., Knowle	Tap at Downend and Frenchay
No. of samples	26	13	20
		Parts per million	
Total solids	258	144	339
Mineral matter	215	117	307
Loss on ignition	43	27	32
Chlorine as chlorides	13	14	34
Nitrate nitrogen	1.01	0.82	0.47
Free ammonia	0.03	0.06	0.01
Albuminoid ammonia	0.06	0.13	0.03
Total hardness	220	88	276
Permanent hardness	54	54	44
pH	7.7	8.4	7.6

Twelve samples from the mains supply (Bristol and West Gloucester) gave evidence of contamination from bacteriological and chemical results.

Eight of the thirteen samples taken from ships in port were unsatisfactory from a chemical and bacteriological point of view.

Sixteen samples of Bristol mains water taken from houses in different parts of the City were examined for metallic contamination (primarily copper). The highest amount of copper found was 0.77 parts per million.

The 79 samples taken from the heating system in the New Council House represent approximately thirteen fortnightly examinations of batches of six samples. The object of the examinations was to control the oxygen evolved in the heating process, since this gas can have a very serious effect upon the piping, etc., of the system, ultimately resulting in severe pitting and perforation of metal. Sodium sulphite is the most effective means of exercising such control, and in general the oxygen in the water has been brought between nil and about 1 p.p.m. The residual sulphite during the period has ranged from nil to about 15 p.p.m., and

it is desirable for this residual to be brought eventually to about 30 p.p.m., and thereafter to maintain a constant replenishment dose to ensure absence of oxygen. Certain technical difficulties in control have been experienced, and it is hoped that a system of injection of the sodium sulphite in solution by means of a hypochlorinator will ensure more efficient mixing of the sulphite in the water system.

Observations on Baths Survey

The swimming bath samples were generally satisfactory and indicated that the recommendations of the report made in 1955 had been largely noted and implemented. All baths were now equipped with the apparatus and solutions for the neutral ortho tolidine test. One spot of bother did occur later in the year and was not without its amusing aspect. Inadvertently the inspectors responsible for taking the samples were supplied with bacteriological water outfits containing sodium thiosulphate and hence it was hardly surprising that no trace of chlorine was detectable in the water taken! Apologies to all concerned settled this contretemps in amicable fashion.

Chlorination Report

The general character of the Chlorination Department is gradually changing, and much work has been carried out on minimising stream pollution and health hazards consequent on sewer blockages.

A considerable amount of attention has been given to the question of safety in sewers, and to this end a technique of ventilating a sewer and keeping a constant flow of fresh air has been devised.

If there is any question as to the purity of the atmosphere in the sewer, tests are carried out by qualified members of the Public Analyst's staff who can advise the foreman responsible if any health hazard exists. Certain members of the staff have also taken training in the use of breathing sets and resuscitation equipment.

Sewage chlorination was in operation from early June until September wholly at a low rate of dose. Confidence was placed in the use of river treatment to control any deterioration of conditions. The need for all-out working never arose but the consumption of chlorine would have greatly exceeded the 35 tons actually used, had the river treatment plant not been available.

Paddling pools in the parks have been chlorinated as in previous years.

Advice has been given regarding the discharge of trade wastes, and in approved cases these have been accepted for discharge into the sewers, under supervision, with treatment where it has been considered necessary.

PART IV. RAG FLOCK ACT

Forty-four informal samples were tested as prescribed by the 1913 Regulations coupled with microscopical examination for the type of fibre, etc., involved. The laboratory remains unequipped to carry out the tests prescribed by the Regulations made under the *Rag Flock and Other Filling Materials Act of 1951*. Indeed, it may be said that as far as Public Analysts are concerned, the Act is moribund if not dead! The samples taken here are a token effort to keep alive an interest in the subject. No new development can be reported, and, as I have commented in previous years, the requirements of space to carry out the work efficiently are non-existent in Canynge Hall and likely to remain so.

PART V. PHARMACY AND POISONS ACT

P. & P.

1	Nicotina fumigator	Contained 0.6 per cent of nicotine. Label should have stated that the article was a "Poison." This information should be printed in red. Being intended for horticultural or agricultural purposes and containing less than 4 per cent of nicotine no register entry is necessary
2	Double strength weed killer "P"	Of satisfactory phenolic strength being within 10 per cent of the declared amount
3	Double strength weed killer "A"	Of satisfactory phenolic strength
4	Caustic oven cleaner	Contained traces of aluminium but not of the order of certain complaint samples received from the Town Clerk's Department
5	Xylenol disinfectant	Of satisfactory composition and in accord with the declaration on the label
6	Slug killer	A suspension of metaldehyde in water. If used as directed there should be little hazard. The comment is made that tighter control would be desirable for metaldehyde in solid form usually as tablets, and which children have mistaken for sweets with fatal results
7	Scale remover	Contained 59 per cent w/v formic acid. Formic acid is not in the Poisons' List, but in strong solutions of this character it is decidedly dangerous to handle and can cause harmful burns. Greater prominence on the label could have been given to these facts
8	Ant killer	This liquid was a sugar syrup intended to act as the bait and containing also a compound related to piperine and which was probably piperonyl butoxide. This substance has insecticidal properties. It is not in the Poisons' List and is free from restrictions on its sale
9	Germicide containing chlorophyll	The probable basis of this preparation was one of the chloroxylenol type of compounds. There was no evidence of phenol or cresols and the product is free from restriction on its sale

PART VI. MISCELLANEOUS ANALYSES**TABLE 10**

1.	General	99
2.	Biochemical and Toxicological (mainly for Regional Hospitals)	80
3.	Infestation	67
4.	Gloucester County	25
5.	Atmospheric Pollution—Zinc and Fluorine	22

Bristol Corporation Departments

6.	Town Clerk and Central Purchasing	23
7.	City Engineer	83
8.	Port Health Office	377
9.	Education	2
10.	Baths	1
11.	Fire Brigade	3
12.	City Valuer	7
13.	City Architect	5
14.	Port of Bristol Authority	20

University Departments

15.	Geology	..	..	..	..	..	12
16.	Pathology	..	..	..	..	..	2
17.	Preventive Medicine	..	..	..	..	..	5
18.	District Inspector's samples	..	..	..	..	..	27
							<hr/> 860 <hr/>

I. General

There is the usual remarkable collection of specimens under this heading, and of the 99 items the following are selected for comment:

A winter assortment of sweets was found to contain some 0.04 per cent of methyl salicylate (oil of wintergreen) and this amount was about four times that commonly present in medicated sweets. Consequently the sweets were of very potent flavour.

Several bronchial catarrh syrups presented some initial difficulties in the assay of creosote, but steam distillation and subsequent treatment with bromine evidently gave satisfactory results.

A wheat wine and a parsnip wine of home brewed vintage contained satisfactory amounts of alcohol.

The colouring matter in a sherbet was satisfactorily separated by chromatography and the two colours obtained were shown to be hexacol blue VRS and tartrazine, both in the recommended list of colours.

The detection of naringin in citrus products, this year in grapefruit, appears almost as a hardy annual! Naringin is the bitter principle contained essentially in the pith of the fruit.

A lemonade powder alleged to have caused blackening of the tongue and mouth was found to contain such an assortment of colours of the rainbow that the admixture would inevitably produce a "black".

A buttered roll was alleged to have attracted the interest of the domestic pet, but no evidence of cat urine could be found.

Some crystals stated to be effective in solution for cleaning stone work was shown to be ammonium silico-fluoride.

A few teething powders were examined but none contained mercury and as far as Bristol is concerned there can be few, if any, of the old type powders available to the public. The new powders contain phenolphthalein, ipecacuanha, sucrose and starch.

A collaborative experiment with other analysts upon the subject of the alkaloids in cocoa and chocolate cakes was undertaken. Results obtained in this laboratory did not agree too well with other findings and tended to implicate the grade of Fuller's Earth used here as the possible cause of the differences. This problem awaits further consideration and experimental work.

A sample of ground almonds alleged to be adulterated was found to contain 40 per cent of sucrose. It was subsequently learned that the complainant, a housewife, had indeed been preparing her own marzipan. No other adulterants were present and most analysts would be wholly in favour of a marzipan with 60 per cent of ground almonds!

2. Examinations for Hospitals

The majority of the 80 specimens submitted by hospitals were of blood and urine with, dare we say, a smattering of faeces and vomit for good measure!

Attention was particularly directed to the detection and estimation of lead, mercury, arsenic, gold, manganese and copper.

One or two cases are perhaps worth a mention where related specimens were involved. Thus:

*Patient's
Initials*

	}	M.148	Blood	..	No lead found. Arsenic 0.92 p.p.m., the normal range being 0.0 to 0.6 p.p.m.
W.M.		M.150	Urine	..	Arsenic 0.55 p.p.m. and lead 0.115 mgm. per 24 hour specimen.
		M.151	Hair	..	Arsenic 280 p.p.m.
Pat	}	M.179	Urine	..	Lead 0.048 p.p.m. and arsenic 0.09 p.p.m.
W.M.		M.180	Hair	..	Arsenic Distal 257 p.p.m. Proximal 57 p.p.m.
					Water washings from hair 30 p.p.m.
H.W.	}	M. 770	Urine	..	} 24 hour specimens showed negligible amounts of manganese of the order of less than 0.1 p.p.m.
H.W.		771	„	..	
H.W.		772	„	..	
A.B.		773	„	..	
A.B.		774	„	..	
A.B.		775	„	..	

An interesting set of figures was obtained for the copper content of the bones of young dogs of 10 weeks old. The normal bones gave the following copper figures based on the dried weight of the powdered whole bone.

M.825	Femur	17 p.p.m.
M.826	Tibia	23 „
M.827	Humerus	11 „

The second set of three specimens from the abnormal animal gave:

M.822	Femur	73 p.p.m.
M.823	Tibia	63 „
M.824	Humerus	89 „

3. Atmospheric Pollution

The survey in the Avonmouth area for pollution was conducted on somewhat different lines from the usual treatment of the rainwater collected in the gauge. The total zinc and fluorine compounds entrained by rain each month is estimated for two sites, one at the Dock itself, and a second at T. Farm. The range of the deposits is shown briefly summarised.

	<i>Avonmouth</i>	<i>T. Farm</i>
Zinc tons/sq. mile	0.05 to 0.43	0.01 to 0.07
Fluorine tons/sq. mile	0.05 to 0.13	0.003 to 0.05

4. Foreign Bodies in Foods, etc., including Infestation and Identification of Insects

The 67 specimens examined again shows the extraordinary variety of foreign bodies found in foodstuffs and also illustrates the increasing consciousness of the public in regard to clean food since most of the complaints arose from members of the public. Where action was considered necessary most cases were dealt with by warning letters and a commendable willingness of manufacturers to co-operate. Only in a few cases was legal action considered necessary.

A list of the more interesting items is appended. The specimens not reported here were mainly breads containing soiled dough, together with a few pies and milks with mould growths.

TABLE II

Laboratory No. M.	Article	Comment
1	Soft Drink	Contained species of gnat
33	Sausages	Bases of black bristles
100	Sausages	Piece of steel with coating of brass at one end
115	Bap	Fragments of wholemeal dough
122	Pikelet	3 pellets of mouse excreta
146	Sausage	Piece of commercial spelter
166	Peppermint lozenges	Bristle from a brush
178	Peanuts	Fragments of a magnesium alloy
187	Golden crumbs	One pellet of rodent excreta
200	Chocolate	Contained the larva of the Mediterranean Flour Moth
226	Margarine } ..	Contained piece of lead
227	Piece of metal } ..	Same characteristics as the lead in M.226
267	Piece of metal } ..	Same as M.227
230	Orange	Four black maggots—larva of Mediterranean Fruit Fly
231	Steak pie	8 Pellets of rodent excreta
254	Marmalade	Specks of silicious matter
302	Milk in bottle ..	Piece of cardboard upon which was the day's milk order
333	Sliced loaf	Stale dough and sacking fibres
341	Black fragment from a bottle of milk	Piece of black rubber
357	Loaf	White grub larva of <i>Ephestia</i> and <i>Diptera</i>
366	Loaf	Rodent hairs in groove in top crust
384	Insect	Red spider
385	Lard cake	Piece of metal tin plate, embedded
393	Doughnuts	Scorched from contact with grid
394	Bread	Pupal case of the clothes moth
397	Bread	Jute or hemp fibres
398	Loaf	One pellet of excreta
402	Loaf	Soiled dough
406	Pork pie	Fungi present
409	Flour	Silicious matter and husk
416	Bread	Metal from packing case
417	Insects	<i>Anobium punctatum</i>
429	Loaf	A moth—garden species
430	Insects	<i>Anobium punctatum</i>
434	Sausage	Clump of hairs of bovine origin—coat hairs of animal
435	Liquorice allsorts ..	Rodent attack and excreta
467	Fungus	Merulius
478	Insect	Meal worm
492	Pieces of pineapple ..	Italian honey bee
524	Fruit malt loaf ..	Nail
525	Loaf	Glass
571	Choc. eclairs	Mould between cream and casing
608	Mixed pickling spice..	Live and dead <i>Stegobium paniceum</i> Chillies and coriander worst affected
643	Wholemeal loaf	Wire present
669	Margarine	Silicious matter and rust
681	Milk	Mould growth and portion of wood louse
705	Coffee	Jute fibres
714	Bread	One fragment of glass
758	Dehydrated beetroot	Charred fragments of beetroot

5. Corporation Departments

Brief reference only is required upon samples received from the other Corporation Departments.

Three specimens received from the Fire Brigade required determination of flash point. All three specimens came within the provisions of the *Petroleum (Consolidation) Act, 1928*.

Two paints submitted by the Education Department complied with appropriate B.S. specifications.

The Bath's Superintendent required the examination of a wall dressing which was essentially bitumen.

Seven batches of sodium sulphite crystals supplied to the City Valuer required checking for sulphite before use in dosing the water supply to the Council House Heating system. Analyses of waters in this connection are mentioned elsewhere in this Report.

As might be expected, the five specimens from the City Architect related to the plasters and cements.

The 20 specimens from the Port of Bristol Authority included several dusts hardened in masses by oxidised oil. Several samples of maize were found contaminated with Armenian Bole. Teepol and thorough washing of the grain seemed to offer the best chances of successful cleaning for subsequent animal feed.

A perfumed disinfectant aerosol preparation contained D.D.T. The opinion was given that excessive or indiscriminate spraying with this compound was not desirable.

6. Town Clerk's Department and the Central Purchasing Department

The majority of the 22 samples examined related to products purchased under contract. These included paints, floor polishes and degreasing compounds. One of the latter caused trouble because of the presence of traces of aluminium. This in contact with caustic soda, the basis of the cleaning agent, had formed sodium aluminate and hydrogen. Sufficient of this gas had been generated to burst the tin with unfortunate results to an operative. The source of the aluminium contamination was never satisfactorily explained. Other grease removers contained the usual ingredients of abrasive and soap with traces of caustic soda.

Several batches of paint from one manufacturer caused considerable trouble. The paint failed to satisfy the B.S. specification in several aspects, notably lack of pigment and excess of water. Eventually, however, satisfactory paints were received after one surprising admission that the water content of certain of the ingredients of the paint was not checked by the manufacturers.

7. University Departments

Three departments—Geology, Pathology and Bacteriology—required examinations of specimens. Six mineral deposits, one clay, four specimens of Cornish granite, and one Egyptian blacks and were examined spectrographically for the first named department. A water and some lung tissue were submitted by the Pathology Department, and a coloured salt, three urines and a specimen of faeces were examined for metals on behalf of the Bacteriology Department.

8. City Engineer's Department

The majority of the 83 specimens submitted were soil samples taken from various boreholes and at varying levels in connection with new building projects. The main interest here was an assessment of the sulphate content and the problem is a continuing one carried out for the Engineer for several years now. Eight tunnel waters were likewise examined for sulphates. One specimen of alleged bitumen-in-rubber solution gave no evidence of rubber.

9. Port Health Office

As in previous years, the bulk of the miscellaneous samples have been submitted by this office, and with the even greater attention given to inspection at the Port, affords an excellent cover of incoming foodstuffs.

The principal commodities were canned goods, fresh oranges, dried fruit, spray dried milk, tea, butter, margarine, cheese, fresh apples, maize and bananas.

No evidence of thiourea was found in any of the samples of oranges, neither was there any indication of waxing. Two samples of oranges from the U.S.A. contained a dyestuff recently included by that country in its list of prohibited colours.

Most of the canned commodities were in excellent condition and free from undue metallic contamination. The exceptions, as in previous years, are certain Italian products, notably canned peeled tomatoes which too frequently are found blown. Hydrogen, carbon dioxide and hydrogen sulphide have all been found in the cans, and excessive amounts of tin are too often present.

One batch of Australian corned beef was unsatisfactory, showing a high proportion of blown cans, whilst minced beef loaf and corned beef also from Australia, contained lead of the order of 3 p.p.m.

Two samples of Canadian canned peaches showed a decidedly unusual amount of salt, 0.8 per cent as NaCl, which needless to say made the fruit definitely saline to taste! No explanation was forthcoming for this curious contamination.

A batch of canned grapefruit sections contained tin approaching 2 grains per lb. and early disposal was recommended.

Tea from Kenya was suspected of containing ethylene oxide, an unlikely contaminant since it is a very volatile gas.

A sample of sherry contained minute woody fibres probably from breakdown of the casks. The sample was cloudy but this separated easily on standing so that it was possible to decant a clear sample.

Some Italian apples contained traces of arsenic of the order of 0.6 p.p.m. A maximum of 1.0 p.p.m. has been recommended.

A considerable quantity of maize was found to be contaminated with solder dross containing lead, tin, zinc, traces of sulphides and some oil. No economical method of recovery could be suggested that would ensure freedom from metallic contaminants.

A bread improver was found to contain a superglycerinated fat which is amongst the compounds recommended for such purposes.

A batch of sultanas from Greece contained excessive amounts of sulphites. The limit is 750 p.p.m. Ten samples of a consignment covering 17 samples had sulphite of the order of 1000 p.p.m. Subsequent blending with lower sulphited sultanas was satisfactorily achieved.

10. District Sanitary Inspector's Samples

The 27 specimens submitted covered the usual range of articles including insects for identification, tinned foods, deposits, etc. A selection of the articles is made for comment.

DSI. 1, 2 & 3 Canned peeled shrimps

One opened can gave an iron content of 1,000 p.p.m. and an unopened can 700 p.p.m. The shrimps had an astringent and unpleasant taste and had darkened in places probably due to sulphides of iron. The product was unsaleable although not necessarily unfit for consumption.

4, 5 & 6	Canned pork luncheon meat				This meat showed a black line along one side of the pack. Analysis of this portion of the meat indicated the presence of lead 5 p.p.m. and tin 50 p.p.m. The main bulk of meat was satisfactory.
7	Insect	..	..		A specimen of <i>Attagenus pello</i> .
9	Fruit pie	..	..		Contained several pellets of rodent excreta. Confirmed by the presence of typical rodent hairs.
11	Insects	..	..		A species of mite—"red spiders."
12 & 13	Insects	..	..		Larval form of the beetle <i>Attagenus pello</i> and also larvae of <i>Diptera</i> (two winged) flies.
14	Beetles..	..	..		All 5 beetles identified as the Death Watch beetle, <i>Xestobium rufovillosum</i> .
15	Chocolate	..	..		Contained 1 in. fragment of a coniferous wood.
16	Can of garden peas	..			Contained two flower buds from weeds, one poppy seed capsule and a snail.
17	Material from a can of rock lobster				Crystals of struvite, or magnesium ammonium phosphate—a natural constituent of certain fish products.
22	Insects	..	..		Species of mite found infesting pigeons and their nesting boxes.
23	Insects	..	..		<i>Ptinus tectus</i> .
25 & 26	Canned minced meat loaf	..	..		The can ends were found to be coated with metallic mercury. This is a most undesirable practice, for apart from concealing probable rusty and old stock cans, could mean contamination of the meat with mercury when the cans were opened.
27	Doughnut	..	..		One pellet of rodent excreta found.

PART VII. REPORT ON WORK FOR THE COUNTY OF GLOUCESTER

This report represents the fifth year's work consequent upon the agreement entered into between the County Council and the Bristol City Council in 1951. The analysis of Food, Drugs and Waters, and Fertilisers and Feeding Stuffs accounts for the bulk of the work, but the Department assists in other matters relating to a miscellany of samples including analyses of rain gauge waters and sulphur dioxide in peroxide cylinders.

Summary of Examinations

TABLE 12

Milk	..	..	..	..	771
Food and drugs	..	..	..	..	485
Water..	..	..	..	..	123
Fertilisers and feeding stuffs			..	..	72
Miscellaneous	..	..	..	..	22
Poisons and Pharmacy Act			..	..	2
Atmospheric Pollution—					
Lead Peroxide	..	..	..	..	60
Deposit Gauges	..	..	..	..	60
					<hr/> 1,595 <hr/>

Food and Drugs Act

There was no major change in the level of food and drug sampling. Again some 60 per cent of the samples related to milk.

TABLE 13

Adulterated Samples

1st quarter

B. 1426	Milk	Informal	16.6 per cent deficient in fat.
B. 1429	"	"	25.0 " " " " " " abnormal N.F.S. at 8.45 per cent.
B. 1430	"	"	21.6 " " " " " "
B. 1433	"	"	6.6 " " " " " "
B. 1437	"	"	8.3 " " " " " "
B. 1438	"	"	20.0 " " " " " "
Bulk fat of B.1426 to B.1441 was 3.05 per cent.			
B. 1491	"	Informal	5.0 per cent deficient in fat, abnormal N.F.S. at 8.4 per cent.
B. 1512	"	Formal	26.7 per cent deficient in fat, abnormal N.F.S. at 8.0 per cent.

2nd quarter

A. 1328	Milk	Formal	5.0 per cent deficient in fat and abnormal N.F.S. at 8.2 per cent.
A. 1331	"	"	8.3 per cent deficient in fat.
A. 1340	"	Informal	26.6 " " " " " "
A. 1370	"	"	10.0 " " " " " "
Bulk fat A.1370 to A.1373 was 3.37 per cent.			
A. 1374	"	Informal	10.0 per cent deficient in fat.
Bulk fat A.1374—A.1377 was 3.95 per cent.			
A. 1383	"	Informal	20.0 per cent deficient in fat.
A. 1387	"	"	6.6 " " " " " "
B. 1561	"	"	11.6 " " " " " "
B. 1585	"	"	5.0 " " " " " "
B. 1586	"	"	5.0 " " " " " "
B. 1587	"	"	25.0 " " " " " "
B. 1602	"	"	25.0 " " " " " "
B. 1603	"	"	33.3 " " " " " "
B. 1605	"	"	13.3 " " " " " "
Bulk fat B.1600 to B.1606 was 2.9 per cent.			
B. 1614	"	"	8.3 per cent deficient in fat.
B. 1615	"	"	5.0 " " " " " "
B. 1621	"	"	16.6 " " " " " " and abnormal N.F.S. at 8.2 per cent.
B. 1623	"	"	6.6 per cent deficient in fat.
B. 1628	"	"	13.3 " " " " " "
C. 1521	"	"	5.0 " " " " " " and abnormal N.F.S. 8.25 per cent.
C. 1522	"	"	6.6 per cent deficient in fat and abnormal N.F.S. at 8.10 per cent.
C. 1523	"	"	5.0 per cent. deficient in fat and abnormal N.F.S. at 8.30 per cent.
C. 1537	"	"	5.0 per cent deficient in fat and abnormal N.F.S. at 8.45 per cent.
C. 1595	"	"	6.6 per cent deficient in fat.
Bulk fat C.1592—C.1596 was 3.5 per cent.			

3rd quarter

A. 1422	Milk	Informal	13.3 per cent deficient in fat.
A. 1430	"	"	5.0 " " " " " "
A. 1496	"	"	Channel Island milk 5.0 per cent deficient in fat.
Bulk fat with A.1497 was just 4.0 per cent.			
B. 1664	"	Informal	Channel Island milk 8.7 per cent. deficient in fat.
B. 1667	"	"	13.3 per cent. deficient in fat.
B. 1672	"	"	Channel Island milk 6.2 per cent deficient in fat.
B. 1674	"	"	Channel Island milk 7.5 per cent. deficient in fat.
Bulk fat B.1671—B.1674 was 4.1 per cent.			
B. 1698	"	Informal	6.6 per cent deficient in fat.
B. 1699	"	"	10.0 " " " " " "
B. 1701	"	"	20.0 " " " " " "
B. 1722	"	"	20.0 " " " " " "
B. 1723	"	"	10.0 " " " " " "
Bulk fat of B.1718—B.1725 was 3.35 per cent.			

B. 1726	..	Formal	6.6 per cent deficient in fat.	
C. 1637	..	Informal	10.0 " " " " " " and abnormal N.F.S. at 8.32 " per cent.	
C. 1638	..	"	3.0 per cent deficient in fat and abnormal N.F.S. at 8.34 per cent.	
			Bulk fat C.1636—C.1639 was 3.12 per cent.	
C. 1641	..	Informal	12.5 per cent deficient in fat.	
			Bulk fat C.1641—C.1643 was 3.92 per cent.	
C. 1646	..	Informal	Channel Island milk 10.0 per cent deficient in fat.	
C. 1647	..	"	Channel Island milk 12.5 per cent deficient in fat.	
			Bulk fat C.1646 and C.1647 was 3.55 per cent.	
C. 1648	..	Informal	Channel Island milk 15.0 per cent deficient in fat.	
C. 1650	..	"	Channel Island milk 10.0 per cent deficient in fat.	
			Bulk fat C.1648 to C.1650 was 3.65 per cent.	
C. 1652	..	Informal	Channel Island milk 3.7 per cent deficient in fat.	
C. 1653	..	Informal	Channel Island milk 20.0 per cent deficient in fat.	
			Bulk fat C.1651—C.1653 was 3.7 per cent.	

4th quarter

B. 1735	Milk	Informal	5.0 per cent deficient in fat.	
B. 1737	"	"	9.4 per cent added water.	
			Bulk fat B.1735 to B.1737 was 3.22 per cent.	
B. 1739	..	Informal	10.0 per cent deficient in fat.	
B. 1742	..	"	11.6 " " " " " "	
B. 1744	..	"	33.3 " " " " " "	
B. 1745	..	"	25.0 " " " " " "	
B. 1746	..	"	16.6 " " " " " "	
			Bulk fat B.1742 to B.1746 was 2.47 per cent.	
B. 1757	..	Formal	5.3 per cent added water	
B. 1759	..	"	5.9 " " " " " "	
B. 1760	..	"	6.6 " " " " " " deficient in fat and also a trace of added water.	
			Bulk fat B.1759 to B.1762 was 3.0 per cent.	
B. 1771	..	Formal	5.0 per cent deficient in fat.	
B. 1772	..	"	28.3 " " " " " "	
B. 1773	..	"	13.3 " " " " " "	
B. 1774	..	"	5.0 " " " " " "	
			Bulk fat B.1770 to B.1774 was 2.75 per cent.	
B. 1828	..	Formal	8.3 per cent deficient in fat.	
C. 1730	..	Informal	8.3 " " " " " "	
			Bulk fat C.1728 to C.1732 was 3.3 per cent.	
C. 1737	..	Informal	Channel Island milk 11.2 per cent deficient in fat.	
C. 1739	..	"	" " " " " " 6.2 " " " " " "	
C. 1767	..	"	" " " " " " 5.0 " " " " " "	
C. 1762	..	"	" " " " " " 7.5 " " " " " "	

Seventy-four milks were returned as adulterated, and of these 12 were taken formally. Seventy-one samples showed deficiencies in fat and three contained added water. In several cases of fat deficiency the bulk sample proved satisfactory. Besides being deficient in fat, eleven samples showed solids-not-fat-figures below 8.5 per cent, although the freezing point determinations did not indicate added water.

Apart from milk the following were returned as irregular:

C. 1411	Beech Tar Linctus	Informal	1/4 minim creosote instead of the 1/2 minim declared.
C. 1428	Beech Tar Linctus	Formal	1/3 minim creosote instead of the 1/2 minim declared.
C. 1431	Bronchial Mixture	Informal	Low in total solids (sucrose) against the declared amount.

TABLE 14

Other Milks requiring comment

	1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	Total
Abnormal solids not fat	44	22	20	7	93
Channel Island milks found to be satisfactory	19	22	29	29	99
Channel Island milks below 4.0 per cent fat	1	7	3	4	15
Channel Island milk poor quality ..	—	—	—	2	2
Appeal to cow samples	—	—	—	7	7
Poor quality. Fat below 3.0 per cent ..	3	6	3	2	14
Suspicious. Low N.F.S., and freezing point depression less than 0.530°C.	—	—	—	1	1

Thus of 771 milks examined, 93 showed abnormal solids not fat. Also a total of 116 Channel Island Milks are included in the 771 samples and of the 116 Channel Island Milks, 15 were below the required 4 per cent fat content, and 2 were returned as of poor quality, since the fat in each case was only 3.9 per cent.

TABLE 15

Other Food and Drugs requiring comment

A. 1232	Steak and kidney pie	Informal	Poor quality, only 15 per cent meat.
A. 1243	Pudding mix	"	Comment on label.
A. 1248	Iced chocolate layer cake mix	"	Comment on label.
A. 1251	Dried peas	"	Infested.
A. 1253	Dried peas	Formal	Repeat of A.1251 and returned as satisfactory.
A. 1257	Apples	"	Arsenic 0.4 p.p.m., and lead 2.7 p.p.m.
B. 1464	Cake mix	Informal	Comment on label.
B. 1484	Apples	Formal	Arsenic 0.5 p.p.m. and lead 0.18 p.p.m.
B. 1501	"	"	Arsenic 0.25 p.p.m. and lead 3.5 p.p.m.
B. 1503	"	"	Arsenic 0.16 p.p.m. and lead less than 0.05 p.p.m.
C. 1468	"	"	Arsenic 0.1 p.p.m. and lead 0.9 p.p.m.
C. 1469	"	"	Arsenic 0.4 p.p.m. and lead 2.9 p.p.m.
C. 1470	"	"	Arsenic 1.0 p.p.m. and lead 3.2 p.p.m.
A. 1326	Tea	Informal	This sample gave normal analytical figures except for a somewhat high insoluble ash. The infusion prepared from the tea was reasonable although the price was only 10d. per 1/4 lb., that is approximately half the normal price.
C. 1603	Dripping	"	This sample showed signs of incipient rancidity but was otherwise satisfactory.

TABLE 16

Water Effluents, etc.

Summary

Wells, springs and boreholes	..	..	52
Mains and public supplies	..	..	44
Sewage effluents and streams	..	..	22
Miscellaneous	..	..	5
			123

Ninety-six samples of drinking water were submitted. Forty-two were satisfactory, the remainder showed evidence of contamination or pollution as the result of chemical or bacteriological tests.

Summary of Fertilisers and Feeding Stuffs

			Formal	Informal
Feeding stuffs	..	..	33	18
Fertilisers	..	..	5	16

Comment was made on the following:

647	Nitrate of Soda	Informal	Slight excess of nitrogen.
758	Layers Pellets	„	Slightly low oil at 3.0 per cent. Limits 3.25 to 4.75 per cent.
654	Special Chick	Formal	Excess oil at 4.65 per cent.
	Turkey Rearers		Limits 2.75 to 4.25 per cent.
655	Special Chick	„	Excess oil at 5.15 per cent.
	Turkey Mash		Limits 3.0 to 4.5 per cent.
652	John Innes Base	„	Slight excess of nitrogen.
653	John Innes Base	Informal	Slight excess of K_2O .
659	General Purpose Fertiliser	„	Excess of nitrogen and insoluble phosphate.
812	Barley meal	Formal	A genuine barley meal and hence no statutory statement is required.
668	Flower fertiliser	Informal	Soluble phosphate a little high. Total phosphate satisfactory.

Pharmacy and Poisons Act

P. & P.1	Red Squill Poison	Informal	Free from all restriction on sale.
P. & P.2	Soldering Fluid	„	Free from all restriction on sale.

Miscellaneous—including Atmospheric Pollution

Toepuffs	..	..	..	..	1
Deposit from sewage	..	..	..	..	1
Sediment from storage tank	..	..	..	..	1
Insects	..	..	..	..	3
“Gammexane”	..	..	..	..	1
Ice cream	..	..	..	..	2
Gas oil	..	..	..	..	1
Cymag	..	..	..	..	1
Slices of bread	..	..	..	..	1
Sub-soil water	..	..	..	..	1
Ice lolly	..	..	..	..	4
Rose hip syrup	..	..	..	..	1
Bottle of milk	..	..	..	..	1
Water from borehole	..	..	..	..	1
Danish tongue	..	..	..	..	1
Canned meat	..	..	..	..	1

22

Besides the foregoing 22 miscellaneous samples there were 120 atmospheric pollution examinations consisting of 60 deposit gauges and 60 lead peroxide cylinders made on behalf of Kingswood and Stroud U.D.C. and Dursley R.D.C.

TABLE 17

Foods	Nature of Sample	Total Examined	Number adulterated or otherwise irregular
Milk	767	74
Apples	14	—
Biscuits	3	—
Baking powder	4	—
Bread	5	—
Blackcurrant juice	1	—
Butter beans	2	—
Blancmange powder	2	—
Bread fat	1	—
Baked beans and pork sausages	1	—
Baked beans with tomato	1	—
Broad beans	1	—
Banana whip	1	—
Bread improver	2	—
Beer and ale	5	—
Black pudding	2	—
Cheese and spreads	4	—
Cheese spread with ham	1	—
Coffee and chicory essence	4	—
Creamed rice	1	—
Christmas pudding	1	—
Cake mix	8	—
Cake filling	1	—
Custard powder	4	—
Condensed milk	1	—
Canned beans	1	—
Canned soup	20	—
Canned tomatoes	1	—
Coconut desiccated	2	—
Curry powder	2	—
Chicken pasties	1	—
Cooking crumbs	2	—
Cider	5	—
Creams	3	—
Chocolate spread	1	—
Canned fruit	4	—
Canned vegetables	6	—
Caraway seeds	2	—
Canned tomato juice	3	—
Canned fish	8	—
Canned meat	5	—
Cornflour	1	—
Cakes	1	—
Dripping	3	—
Dried vegetables	6	—
Dried fruit	3	—
Evaporated milk	1	—
Fruit pie	1	—
Faggots	2	—
Foam crystals	1	—
Flour, S.R., and plain	11	—
Flavourings	2	—
Grapefruit juice	1	—
Ground nutmeg	2	—
Gelatin compound	1	—
Gravy browning	1	—
Horseradish relish	3	—
Honey	4	—
Ice cream	7	—
Ice lolly	1	—
Jams and preserves	19	—
Jellies, table, cream and crystals	9	—

Nature of Sample						Total Examined	Number adulterated or otherwise irregular
Compound glycerine and thymol	..	..	..	..	..	1	—
Cod liver oil capsules	..	..	..	..	..	1	—
Codeine, compound tablets	..	..	..	..	..	1	—
Cascara sagrada tablets	..	..	..	..	..	1	—
Castor oil	..	..	..	..	..	1	—
Cinnamon and quinine	..	..	..	..	..	1	—
Calamine lotion	..	..	..	..	..	1	—
Distilled witch hazel	..	..	..	..	..	2	—
Epsom salts	..	..	..	..	..	1	—
Friars Balsam	..	..	..	..	..	1	—
Gee's linctus	..	..	..	..	..	3	—
Glucose tablets	..	..	..	..	..	1	—
Glycerine	..	..	..	..	..	1	—
Glucose barley sugar	..	..	..	..	..	1	—
Halibut oil capsules	..	..	..	..	..	2	—
Halibut liver oil	..	..	..	..	..	1	—
Lysol	..	..	..	..	..	1	—
Liquafruta	..	..	..	..	..	1	—
Laxative tablets	..	..	..	..	..	1	—
Lysantal pastilles	..	..	..	..	..	1	—
Olive oil	..	..	..	..	..	6	—
Olive oil and raspberry vinegar	..	..	..	..	..	1	—
Phosferine tablets	..	..	..	..	..	1	—
Petroleum jelly	..	..	..	..	..	1	—
Preparation H	..	..	..	..	..	1	—
Pernivit tablets	..	..	..	..	..	1	—
Quinine tablets	..	..	..	..	..	2	—
Relaxa tablets	..	..	..	..	..	1	—
Rose hip syrup	..	..	..	..	..	1	—
Saccharin tablets	..	..	..	..	..	2	—
Snowfire ointment	..	..	..	..	..	1	—
Saline	..	..	..	..	..	1	—
Tincture of iodine	..	..	..	..	..	2	—
Tar linctus	..	..	..	..	..	2	2
Vitamin capsules	..	..	..	..	..	1	—
Vitamised iron tonic tablets	..	..	..	..	..	1	—
Zinc and castor oil cream	..	..	..	..	..	1	—
Total of drugs	..	..	..	..	..	66	3
Total of food and milk	..	..	..	..	..	1190	74
TOTAL	..	..	..	..	..	1256	77

PART VIII. ATMOSPHERIC POLLUTION

Table 18 summarises the recordings made in connection with pollution problems.

TABLE 18

Bristol

Deposit gauges	..	..	..	..	96
Lead peroxide for sulphur	..	..	..	..	132
Phosphorus and silica	..	..	..	..	36
Zinc and fluorine	..	..	..	..	23
Recordings for Port of Bristol	..	..	..	..	337
					624

Gloucester County

Deposit gauges	..	..	..	..	60
Lead peroxide	..	..	..	..	60
					<hr/> 120 <hr/>

As in previous years interest in the subject of atmospheric pollution has been fully maintained and once again the number of examinations amounted to nearly 10 per cent of the work of the Department. There was a notable increase in the work for the County with the establishment of two sites in Stroud.

The City Survey

The four stations concerned in the City survey located at Marsh Street (City Centre), Shaftesbury Crusade (St. Philip's), the Zoological Gardens (roof of the elephant house) and Blaise Castle (roof of the stables) were fully operative during the year in respect of both rain gauge and sulphur dioxide apparatus.

It is worth while to indicate how the degree of pollution is measured, and in respect of the rain gauges, we have the D.S.I.R. approved apparatus which consists essentially of a glass collecting bowl of known area, which feeds the rainfall into a bottle of some 10 litres capacity. Very approximately a full bottle of 10 litres would represent some 5 inches of rainfall. Each apparatus is left for one month, and on or about the 1st of each month the rainfall is collected and a fresh 10 litre bottle placed in position. In most cases the bottle is contained in a lagged box to protect it during frost conditions. At periods of heavy rain it may be necessary to inspect each site at mid-month, or as dictated by weather conditions. Upon receipt at the laboratory, the collected rainfall is measured and examined for soluble, insoluble and tarry matters with estimations of calcium, chloride, sulphate and pH value. The Local Authority is a co-operating body of the D.S.I.R. in pollution surveys, and all results are submitted for correlation and assessment to the Director of Observations, Fuel Research Station, Greenwich.

The total deposit at the Waterworks and Shaftesbury Crusade remains at approximately the same level as in 1955 with rainfall also of the same order—25 inches. The Zoological site indicates some improvement in conditions thus 1956 (110 tons), 1955 (126 tons) and 1954 (143 tons). All the three foregoing sites also show improvement in the degree of sulphur pollution over the 1955 figures. The Blaise Castle site indicates an increased deposition compared with 1955, 110 tons in 10 months of available data compared with 103.5 tons in the full year 1955, whilst the sulphur pollution remains of the same order. There are indications of a worsening of conditions in the Blaise area due no doubt to the growing housing site.

The Kingswood deposition continues to show improvement: 1956 (109 tons), 1955 (116 tons), 1954 (183 tons). The rainfall in the same order of years was 22.7, 19.9 and 40.9 inches respectively, and the sulphur pollution 14.9, 21.90 mgms. per 100 sq. cm. per day totalled for the year for comparison.

The continuous smoke and sulphur dioxide recording apparatus was not operative this year. Measurements and observations had been made in previous years as part of a collaborative survey for arsenic, radio active substances and benzpyrene. The immediate urgency for data having been met, the observations were no longer essential.

The Avonmouth Survey

The three sites in this area are at the Docks, T. Farm and Green Splot Farm. All three are equipped for measurement of sulphur pollution, whilst the Dock and T. Farm sites are also provided with rain gauges. However, the rain collected is not examined by the usual methods, but with particular reference to the zinc and fluorine pollution in the area. The survey is essentially one of comparison, and does not purport to be absolute. It is realised that the method of collection leaves something to be desired, but the obvious method of drawing air through an absorption train could not be readily controlled, and would involve much travelling to the area for sampling purposes.

The amount of zinc deposit at the Avonmouth Dock was five times the deposit at T. Farm, whilst the fluorine deposit was three times as heavy. It should be noted that zinc includes zinc and its compounds and fluorine includes total fluoride ion principally as fluorides. No attempt has been made to determine the actual nature of the depositions. The sulphur pollution at the three sites with the 1955 in brackets as comparison, are as follows:

	Avonmouth Dock	38.7	(43.1)
	Green Splot	14.6	(15.1)
and	T. Farm	13.5	(8.5)

expressed as mgms. of SO_3 per 100 sq. cm. per day totalled for the year.

The Portishead Survey

This survey began in 1949 and over that period to date, the deposit at the Docks site has ranged from 284 tons as the lowest figure in 1952 to 562 tons in 1954. The current year indicates 552.6 tons for 11 months. The rainfall has ranged from 21.7 inches in 1955 to 37.4 inches in 1954 with the current year at 24.5 inches. Under existing conditions it would appear that one can expect 500 tons of deposit per sq. mile at the Dock Site.

The control site at Meadow Farm has remained comparatively steady at about 80 tons for the 8 years of survey, the current year being 73.5 tons.

The South Road Site has likewise remained fairly steady in the neighbourhood of 200 tons over the years—the current figure is 202.5 tons for 11 months observations.

The fourth site in this area at the Power Station has the lead peroxide cylinder only. The comparison SO_3 figures for the area with the 1955 figures in brackets are South Road 12.6 (14.8), Meadow Farm 13.5 (18.6), Portishead Dock 12.9 (21.6), and Power Station 7.9 (18.7). This picture is particularly encouraging and indicates a very significant and welcome fall in sulphur pollution. Estimations of silica and phosphorus deposits in the area have continued throughout the year and no significant changes can be reported.

The Dursley Survey

Both the sites in this area at the Council Offices and Upper Cam Vicarage (recently changed to Street Farm), indicate deposit pollution of the order of that at the Zoo site, that is about 110 tons per sq. mile per year. The sulphur pollution is also similar to the Zoo site which typifies a residential area. The implication is that most of the pollution in the Dursley area is due to the domestic fire and no serious pollution appears to be coming from industry in the area, at least as indicated by the chosen sites.

The Stroud Survey

The Cinema Site gave a total deposit of 171·7 tons per sq. mile for the year and can be compared with the centre of Bristol (200 tons).

The High School Site gave 82·2 tons and compares favourably with the rural site in the Portishead area, 73·5 tons and the Bristol Zoo Site 100·8 tons.

As a further comparison of rural areas, the least deposit, 53 tons, was obtained at the Westbury, Wilts, site.

The sulphur dioxide figures for the Stroud Sites show a curious reversal which must be due to drift of sulphur gases due to atmospheric conditions, for we find that the Cinema Site has the lesser sulphur pollution figure at 0·81, compared with the High School 1·28. At the centre of Bristol and Temple Meads, the comparable figure is 2·0, at the Zoo 0·9, and at Avonmouth Dock we find the highest SO₂ figure at 3·2.

TABLE 19

Summary of Atmospheric Pollution

	Total Annual Deposit tons per sq. mile	Total rainfall in inches	Average SO ₂ in mgm. per 100 sq. cm. per day
Waterworks	201·36	25·68	2·03
Shaftesbury Crusade ..	206·01 (11 months)	24·05	2·07
Zoological Gardens ..	100·83 (11 months)	26·86	0·88
Blaise Castle	109·96 (10 months)	25·22 (11 months)	1·09
Meadow Farm, Portishead	73·53	25·60	1·13
South Road, Portishead..	202·54 (11 months)	24·87	1·05
Portishead Docks ..	552·60 (11 months)	24·49	1·08
Kingswood	108·85	22·71	1·24
Upper Cam Vicarage, later Street Farm, Dursley	73·23 (11 months)	24·57 (11 months)	0·85
Council Offices, Dursley	94·05	24·61	1·07
Fullingbridge, Westbury, Wilts	48·47 (11 months)	20·57 (11 months)	—
Gaumont Cinema, Stroud	171·74	24·14	0·81
Girls' High School, Stroud	82·21	22·99	1·28
T. Farm, Avonmouth ..	—	15·29 (9 months)	1·12
Green Splot, Avonmouth	—	—	1·22
Avonmouth Dock ..	—	20·63 (10 months)	3·23
Power Station, Portishead	—	—	0·66

PART IX. SPECTROSCOPY

The number of samples dealt with during the year was 1,118, again showing an increase over the total for the previous year (1,003). Of this number, 950 were quantitative examinations of food for toxic metals. A further small economy has been achieved by increasing the average number of samples per plate to 9·6, as against 9·0 for last year.

Of the non-routine examinations, toxicological samples for the local hospitals made up the largest group; others of interest were of the "foreign-body-in-food" type, and included a piece of spelter in a sausage, and a lead washer in margarine.

The spectroscopic section as at present constituted is now working at full capacity, so that time is hard to find for any development work. However, it was possible to continue the investigation of the properties of photographic emulsions. This has a special relevance to the routine work

of the section, because the majority of the quantitative results depend on the characteristic curve of a photographic plate. The time used on this largely mathematical exercise was well spent, since it has been found possible to use lines of lower density than are generally thought to be acceptable. This leads to an extension of the range of concentrations detectable to include very small traces.

The presence of alkali metals, in food examined for trace metals, continues to be an embarrassment, although a method has been found which diminishes the trouble. This consists of adding to all samples such an excess of sodium that any variations of alkali metal content are effectively swamped. Following on this, it was possible to "promote" certain types of sample such as canned fish from the semi-quantitative to the fully quantitative level. The cost of this step is a reduction in the sensitivity for traces; this would not have been permissible without the use of the modified plate characteristic curve, which tends to offset the effect of the sodium.

Attempts are continuing to find a method, which is both rapid and reliable, of separating heavy metals from the ash of food. A new modern technique based on the use of ion exchange resins is to be investigated.

A rapid method for the polarographic determination of lead in blood was tried out, in conjunction with the Research Department of the Imperial Smelting Corporation, who kindly made their instrument available to us. The conclusion reached was that while the instrumental aspect of the investigation was satisfactory, some form of chemical pre-treatment of the blood will be necessary.

A flame photometer was purchased during the year; a careful study of its ability to determine alkali metals, and any mutual interference effects, showed it to be suitable for this purpose. Its use can be extended to include calcium and magnesium.

The close association with the Geology Department of the University has continued; a further three persons have received training in the use of spectroscopic apparatus. In addition, the analysis of a number of specimens was undertaken.

PART X. OTHER ACTIVITIES

During the year a considerable volume of work not of an analytical nature has again been carried out.

Several general lectures on the work of the Department were given to various organisations including Townswomen's Guilds, Toc H (Knowle Branch), and the Falfield Prison. More detailed lectures were given to D.P.H. Students (20 lectures), a week-end conference to Sanitary Inspectors on Atmospheric Pollution and three lectures with demonstrations on the same subject to a course on Boiler House Practice. The problems of clean air involved several meetings and conferences, two in London on the Standing Conference of Co-operating Bodies and a Fuel and Power Conference.

Civil Defence activities continue to occupy a significant quota of time. As Chief Technical Reconnaissance Officer for the City, I was requested to attend a four-day course at the Staff College at Sunningdale in February. Several T.R.O. meetings were held at Canynge Hall and the Clifton Sub-Control, whilst visits were made to the Henleaze Sub-Control and the War Room. A useful T.R.O. Refresher Course was held at the

University in April and there was a Civil Defence Exhibition at the Drill Hall, Whiteladies Road, in September. In December lectures were given to a new intake of T.R.O's.

Several organisations visited the Laboratory and these included A.R.I.C. Students from the College of Technology, Students of the University Chemical Society, Health Visitors, and Clifton High School girls. Personal visits were made by Mr. Manley, Public Analyst for Leeds, and students from Sierra Leone, the Sudan and Kuwait on the Persian Gulf.

Numerous consultations involved the City Valuer regarding the Council House Heating System, the Docks Office on the storage of handling of various commodities and the problems of trade effluents, the Medical Officer of Health on colourings in foods and many other matters relating to staffing, food standards and impending conferences.

The usual attendances at quarterly meetings of the Weights and Measures Committee, Gloucester County, were made, whilst for both the Bristol and County Authorities, twelve attendances at Court were required involving foreign bodies in food and milk adulteration.

Several visits were made to London to attend meetings of the Association of Public Analysts and where necessary to discuss with trade organisations matters of common interest in the agreement of standards of composition of foods, codes of practice, and allied problems of labelling. I have the honour and privilege to be the Secretary of the Standards Committee of the Association and I wish to acknowledge the interest shown by the Health Committee on the work of formulating food standards and for the permission granted to attend the appropriate meetings.

PORT HEALTH SERVICES

Medical Inspection and Sanitary Circumstances

Dr. D. T. Richards
Senior Medical Officer (Port)

SECTION I

General

During the year 1956, Bristol's overseas trade did not quite reach the peace-time record established during the previous year. This slight decrease in trading activity was due mainly to measures of national economy which had the effect of reducing the volume of imports into the country; and, to a lesser extent, to the closure of the Suez Canal, which caused some delay in the arrival of ships from India and other Eastern countries in the later months of the year.

One-third of the "foreign-going" arrivals were from infected ports, or from ports situated within infected localities in the Middle East, Far East or the African continent. The clearance of each of these ships was carefully supervised by the Port Health Staff at the time of arrival. As an additional precaution, all ships which arrived from ports infected with smallpox were boarded daily whilst in port in order that cases of sickness might be brought to the immediate notice of the Port Medical Officer. This measure is a worthwhile one, for in many circumstances the risk of the development of smallpox does not begin to increase until after a ship has docked, and it is during this crowded period of discharge and loading that the early ascertainment of the disease becomes so important.

The provisions of the *Public Health (Ships) Regulations, 1952*, have been enforced during the year. No breach of these regulations has been reported. Duties in connection with the *Aliens Order, 1953*, which demand a twenty-four hour watch at both the seaports and the airport have also been fulfilled during the period under review.

This annual report is prepared, as in former years, on the lines indicated in form Port 20 issued by the Ministry of Health to port health authorities. As directed, many of the standing arrangements described in the quinquennial form of this report have been omitted to avoid repetition, unless an important change has taken place.

TABLE A

Name of Officer	Nature of appointment	Date of appointment		Qualifications	Any other Appointments held
		(a) Original	(b) To present post		
Richards, Dr. D. T.	Senior Medical Officer (Port)	1.11.38	13.1.47	L.R.C.P. (Lond.) M.R.C.S. (Eng.), D.P.H.	—
Rogan, Dr. E.	Assistant Medical Officer (Port)	1.7.56	1.7.56	L.R.C.P.I.&L.M., L.R.C.S.I.&L.M., D.P.H.	—
Davies, E. I.	Senior Port Health Inspector	13.5.37	1.11.43	Certs. of R.S.I., S.I.E.J.B., R.S.I., Meat & Other Foods Cert. Testamur Welsh School of Medicine in Public Health and Hygiene, Master Mariner (Foreign-going).	—
Earthrowl, N. A. C.	District Public Health Inspector (Port)	15.11.37	Dec. 1940	Certs. of R.S.I., S.I.E.J.B., R.S.I., Meat & Other Foods Cert. Master Mariner (Foreign-going).	—
Perkins, W. M.	District Public Health Inspector (Port)	1.9.46	1.9.46	Certs. of R.S.I., S.I.E.J.B., Lieut. (R.N.V.R.—H.O.)	—
Spencer, F.	District Public Health Inspector (Port)	15.4.52	15.4.52	Certs. of R.S.I., S.I.E.J.B., "Second Mate's," Board of Trade Cert. (Foreign-going) steamship.	—
Bowen, W. T.	Assistant to the Port Inspectors	27.1.36	27.1.36	Master Mariner's Cert.	—
Baston, C. W.	Assistant to the Port Inspectors	13.2.38	13.2.38	—	—
Clevely, R. E.	Senior Group Clerk	20.3.44	1.4.56	—	—

IN ADDITION—The following Assistant M.O.s undertake relief Port Duties as required : Dr. A. M. Fraser and Dr. J. E. Kaye, Dr. R. C. Wofinden, Medical Officer of Health, is Port Medical Officer ; Dr. P. G. Roads, Deputy Medical Officer of Health, is Deputy Port Medical Officer. Mr. F. J. Redstone, Chief Public Health Inspector, is Chief Port Inspector.

SECTION II

Amount of Shipping Entering the District During the Year

The table below, which gives the import and export tonnage figures together with the number of foreign and coastwise arrivals for the last four years, shows that the number of vessels which arrived from foreign ports was 236 less in 1956 than in 1955. This was almost entirely due to a reduction in the number of vessels of 1,000 tons and under bringing in cargoes from near continental ports. A total of 650 of these small ships entered the port in 1956 compared with 874 in the previous year.

Nevertheless, the post-war trading trend is an upward one and the Port of Bristol Authority is continuing with the development of projects which will ensure that port facilities are adequate for trade expansion. A large area of land reclamation has nearly reached completion and in due course will be used as a railway siding. This forms part of the programme for constructing new roadways and large modern transit sheds to replace those at "R", "Q", and "S" berths. The new lay-out of an extensive section of West Wharf is also well advanced. Here, a circular roadway and railway sidings have been constructed and the storage area for timber cargoes has been extended quite appreciably. New offices and public conveniences have also been erected in the section. The last named are fitted with modern sanitary appliances and cubicles to permit maximum privacy. Fountain-type drinking water taps have also been installed externally.

Year	Vessels normally trading		Tonnage of Foreign	
	Foreign	Coastwise	Imports	Exports
1956	1,442	4,855	3,607,490	126,577
1955	1,678	5,028	3,769,641	93,043
1954	1,421	4,925	3,041,146	72,728
1953	1,247	5,243	3,062,276	75,791

SECTION III

Character of Shipping and Trade During the Year

The character of shipping and trade at the port remains constant from year to year. It is adequately dealt with in tables (B) and (C) which follow.

TABLE B

Amount of Shipping Entering the District During the Year

Ships from	Number*	Tonnage*	Number inspected		No. of ships reported as having or having had during the voyage infectious disease on board †
			by the Medical Officer of Health	by the Public Health Inspector	
Foreign ports	1,442	3,888,750	485	1,485	20
Coastwise	4,855	1,389,408	—	762	—
Total	6,297	5,278,158	485	2,247	20

* Figures supplied by courtesy of the Port of Bristol Authority. (Discrepancy between number of vessels shown as arriving and number inspected in foreign section arises from differing classification of " Foreign " and " Coastwise " vessels as applied by the Port of Bristol Authority and the Bristol Port Health Authority).

† Excluding vessels having venereal disease on board.

TABLE C (a)
Passenger Traffic

		Seaport	Airport
Inwards	British	1,670	776
	Alien	217	459
Outwards	British	1,139	856
	Alien	88	401

TABLE C (b)—Cargo Traffic

Principal Imports

	<i>Commodities</i>	<i>Tons</i>
Cocoa		7,027
Feeding stuffs for livestock .. .		364,490
Fertilisers		244,548
Flour and other cereal products .. .		17,560
Fruit:		
Bananas		33,358
Citrus		9,746
Dried		3,412
Other kinds		22,687
Grain:		
Barley		198,859
Maize		205,949
Wheat		524,773
Other kinds		83,890

Metals:

Aluminium	..	..	..	..	..	..	58,331
Copper	..	..	..	..	..	..	6,822
Iron and steel	..	..	..	..	..	..	71,343
Other kinds	..	..	..	..	..	..	17,014
Molasses	..	..	..	..	..	..	66,637
Oilseeds and Oilnuts	..	..	..	..	..	..	53,128
Ores	..	..	..	..	..	..	95,848
Paper	..	..	..	..	..	..	37,005

Petroleum:

Spirit	..	..	..	..	..	..	294,084
Other kinds	..	..	..	..	..	..	730,275

Provisions:

Butter	..	..	..	..	..	..	16,292
Cheese	..	..	..	..	..	..	8,285
Lard	..	..	..	..	..	..	5,470

Meat:

Bacon and ham	..	..	..	..	..	..	2,085
Canned	..	..	..	..	..	..	4,469
Frozen	..	..	..	..	..	..	26,044
Other kinds	..	..	..	..	..	..	375

Tea	..	..	..	..	..	..	10,186
Timber	..	..	..	..	..	..	116,474
Tobacco	..	..	..	..	..	..	37,943
Wines and spirits	10,878
Woodpulp	125,507
Other goods	96,696

Total foreign imports	3,607,490
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Principal Exports

Buildings, prefabricated	33
Carbon black	1,286
Chemicals	2,921
Clay	..	..	..	..	..	..	21,972
Cocoa and cocoa waste	..	..	..	..	..	..	1,796
Coke	..	..	..	..	..	..	22,528
Iron and steel	..	..	..	..	..	..	12,859
Motor vehicles and parts	..	..	..	..	..	..	12,715
Ores	..	..	..	..	..	..	8,960
Painters' colours	..	..	..	..	..	..	514
Paper	..	..	..	..	..	..	363
Petroleum	..	..	..	..	..	..	184
Strontia	..	..	..	..	..	..	7,242
Other goods	..	..	..	..	..	..	33,204
Total foreign exports	..	..	..	..	..	..	126,577

Note.—Figures supplied by courtesy of Port of Bristol Authority.

TABLE C (c)—Principal Ports from which Ships Arrive

<i>Country</i>	<i>Ports</i>
Algeria	Algiers, Oran.
Argentina	Buenos Aires, Bahia Blanca, Rosario, San Lorenzo.
Australia	Adelaide, Albany, Banbury, Brisbane, Cairns, Fremantle, Geelong, Melbourne, Port Pirie, Sydney.
Belgium	Antwerp, Bruges, Ghent.
Brazil	Santos.
British West Indies ..	Bowden, Kingstown, Montego Bay, Oracabessa, Port Antonio, St. Kitts, Trinidad.
Burma	Rangoon.
Canada	Botwood, Chemainus, Halifax, Montreal, New Westminster, Port Alfred, Port Arthur, Port Churchill, Prince Rupert, Quebec, St. John, Sorel, Three Rivers, Vancouver.
Canary Islands	Las Palmas.
Ceylon	Colombo.
Cyprus	Limassol.
Cyrenaica	Tripoli.
Denmark	Copenhagen, Frederikssund, Esbjerg.
Egypt	Alexandria, Port Said.
Finland	Abo, Hamina, Hango, Haukipudas, Helsingfors, Kotka.
France	Bayonne, Bordeaux, Deauville, Dieppe, Dunkirk, Havre, La Rochelle, L'Orient, Marseilles, Nantes, Nemours, Quimper, Rouen, Tonnay-Charente, Treport, St. Malo, St. Valery, Vannes.
French Cameroons, ..	Tiko Is.
French Equatorial Africa	Dakar, Port Gentil.
Gambia	Bathurst.
Germany	Bremen, Bremerhaven, Emden, Friedrichshaven, Hamburg, Harborg, Stettin, Wismar.
Gold Coast	Accra, Takoradi.
Greece	Patras, Zante.
India	Bombay, Calcutta, Vizagapatam, Cochin.
Indonesia	Sourabaya, Tegal.
Iran	Basra, Bahrein.
Israel	Jaffa.
Italy	Genoa, Livorno, Naples, Palermo.
Japan	Kobe, Yokohama.
Jugoslavia	Rijeka, Split.
Kenya	Mombasa.
Kuwait	Mena al Ahmadi.
Libya	Benghazi.
Malaya	Port Swettenham, Singapore.
Mexico	Tampico.
Morocco	Casablanca, Saffi, Sousse.
Mozambique	Beira, Mozambique.
Nauru Island	

Netherlands	Amsterdam, Delzyl, Dordrecht, Rotterdam, Spisk, Terneuzen.
Netherlands, West Indies	Aruba, Curacao.
New Zealand	Auckland, Bluff, Port Chalmers, Lyttleton, New Plymouth, Otaru, Napier, Timaru, Wellington.
Nigeria	Lagos, Port Harcourt, Sapele, Warri.
Norway	Bergen, Kristiansund, Oslo, Risor, Skein, Stavanger, Tredestrand, Trondheim.
Pakistan	Chittagong, Karachi.
Persian Gulf	Bahrein Is., Ras Tanura.
Portugal	Lisbon, Oporto.
Puerto Rico	San Juan.
Rumania	Constanza.
Sierre Leone	Freetown.
South West Africa	Walvis Bay.
Spain	Barcelona, Bilbao, Burriana, Cartagena, Huelva, La Vera, Tarragona, Seville Valencia.
Sudan	Port Sudan.
Sweden	Gelfe, Gothenburg, Iggesund, Kramfors, Malmo, Nyhammar, Stockholm, Sundsvall.
Tanganyika	Dar-es-Salaam, Zanzibar.
Tunisia	Sfax, Tunis.
Turkey	Iskanderun, Istanbul.
Uruguay	Puerto la Cruz, Montevideo.
Union of South Africa ..	Cape Town, Durban, East London, Port Elizabeth.
Union of Soviet Socialist Republic	Leningrad, Novorossisk.
United States of America	Baltimore, Baton Rouge, Baytown, Beaumont, Boston, Corpus Christi, Freeport, Galveston, Houston, Los Angeles, Mobile, New Orleans, Newport News, New York, Norfolk, Philadelphia, Port Sulphur, Port Jacksonville, San Francisco, Tacoma, Tampa, Texas City, Wilmington.
Venezuela	Punta Cardon.

SECTION IV

Inland Barge Traffic

Number of craft entering during the year:	3,888
Tonnage of craft entering during the year:	302,798
Places served by the traffic:—	
Banbury	Newport
Barry	Sharpness
Bridgwater	Stourport
Cardiff	Swansea
Frampton	Upton
Gloucester	Worcester
Lydney	

SECTION V

Water Supply

(1) **Source of Supply for:—**(a) *The District*(b) *Shipping*

These were described in my report for 1955 and are unchanged.

(2) **Reports of Tests for Contamination:—**

Routine samples were taken from several points on the water company's supply mains during 1956. They were all found to be satisfactory.

(3) **Precautions Taken Against Contamination of Hydrants and Hosepipes**

Standpipes and hoses, used to convey water from the quayside mains to ships, are regularly flushed out and cleansed. Water is allowed to run for a few minutes before being delivered to the ships' tanks.

(4) **Number and Sanitary Conditions of Water Boats**

One water boat is available in the Bristol City docks. It was brought into operation, replacing the old water boat at these docks, in July 1955, and contains two water tanks each of 1,300 gallons capacity.

Details concerning samples of water taken from this craft are contained in a special report dealing with this work in the text which follows.

SECTION VI

Public Health (Ships) Regulations, 1952

(1) **List of Infected Areas (Regulation 6)**

This list is prepared and brought up to date monthly. It summarises the information contained in the World Health Organisation's Weekly Epidemiological Record of Quarantinable Diseases prepared for the guidance of port health authorities, and is regularly circulated as follows, any important addition or amendment being subsequently forwarded during the month as a separate memorandum:—

H.M. Customs and Excise (Seaport and Airport).

H.M. Immigration Officer (Seaport and Airport).

The Docks Superintendent.

The Haven Master (for distribution to pilots).

The Manager, Whitchurch Airport.

Medical Officers, Shipping Federation.

Medical Officers, Special Treatment Centres.

Waterguard Superintendent.

Pilotage Collector, Pill.

(2) **Radio Messages**

(a) *Arrangements for sending permission by radio for ships to enter the district (Regulation 13).*

(b) *Arrangements for receiving messages by radio from ships and for acting thereon (Regulation 14 (1), (a) and (2)).*

These were described in the 1955 Annual Report and are unchanged.

(3) Notifications otherwise than by Radio (Regulation 14 (1) (b))

Arrangements for receiving notifications otherwise than by radio and for acting thereon.

These are unchanged.

(4) Mooring Stations (Regulations 22 to 30)

Situation of stations, and any standing directions issued under these Regulations.

The details given in the quinquennial report are unchanged.

(5) Arrangements for:—

(a) *Hospital accommodation for infectious diseases (other than smallpox).*

(b) *Surveillance and follow-up of contacts.*

(c) *Cleansing and disinfection of ships, persons, clothing and other articles.*
Unchanged.

SECTION VII**Smallpox**

1. Cases and suspected cases of smallpox occurring within the district are sent to the smallpox wing of the Ham Green Infectious Diseases Hospital, Pill, near Bristol.

2. Ambulance facilities are provided by the ambulance service of the Bristol Corporation, which is administered by the Medical Officer of Health. The vaccinal state of the ambulance crews is satisfactory and subject to continuous review.

3. Two consultants are available in the event of smallpox:

(i) Dr. J. Macrae, Medical Superintendent, Ham Green Hospital, Pill, near Bristol; and

(ii) Dr. Richard Clarke, O.B.E., Harley Lodge, Clifton Down, Bristol, 8.

4. Facilities for the laboratory diagnosis of smallpox are available in conjunction with the Preventive Medicine Laboratories (University of Bristol).

SECTION VIII**Venereal Disease**

Full information concerning the situation, and giving the hours during which the Medical Officer is in attendance at the venereal disease centres at Avonmouth and Bristol Docks, is given to the crew of every vessel entering the port. This information is contained in handbills (including a sketch map) which are freely distributed to each ship. When indicated, in-patient treatment under the direction of the venereal diseases consultant is available at the Ham Green Infectious Diseases Hospital.

The arrangement whereby the Port Medical Officer, who is usually the first to ascertain venereal conditions, acts in an additional capacity as medical officer to the venereal disease centre, has continued. This arrangement has worked satisfactorily.

The following table relates to seamen treated at the Avonmouth Centre during the past seven years:—

Year	Syphilis	Chancroid	Gonorrhoea	Non V.D.	Total
1950	62	13	226	217	518
1951	39	17	180	284	520
1952	29	20	196	223	468
1953	26	6	142	283	457
1954	30	20	112	280	442
1955	39	13	135	281	468
1956	27	16	116	254	413

SECTION IX

TABLE D

Cases of Notifiable and Other Infectious Diseases in Ships

Disease	Category and number of cases during the year					Number of ships concerned
	Cases landed from ships from foreign ports		Cases which have occurred on ships from foreign ports but have been disposed of before arrival		Cases landed from other ships	
	Pass.	Crew	Pass.	Crew	Pass. Crew	
Chicken Pox ..	—	—	—	1	— —	1
Dysentery ..	—	2	—	—	— —	2
Food Poisoning	—	1	—	—	— —	1
Influenza	—	6	—	—	— —	6
Malaria	—	2	—	5	— —	7
Pneumonia . . .	—	3	—	—	— —	3
Pulmonary T.B. . .	—	2	—	—	— —	2
Non-Pul. T.B. . .	—	—	—	1	— —	1
Totals	—	16	—	7	— —	23

Table D is self-explanatory.

Pulmonary Tuberculosis

When a case of pulmonary tuberculosis is ascertained in a member of a ship's crew, it is now customary to recommend to the owners that all contacts be referred to the miniature mass radiography unit. Sometimes, however, the necessary arrangements cannot be made in the time available and it may become necessary to communicate with the Medical Officer of the next port of call in this country, asking him to assist by making these arrangements in his area.

This practice is a growing one and, in our experience, readily receives the goodwill and co-operation of the shipowner. But in certain cases, the future coastwise movements of the vessel are obscure or difficult to determine with accuracy; there might well be a last-minute diversion, or the

vessel may berth at a second port for only a sufficient length of time to discharge part-cargo; furthermore we have not always received confirmation from the second port that the arrangements were, in fact, capable of being put into operation.

The following is an interesting example of what can be achieved as a result of inter-port co-operation under favourable circumstances.

In June, a native seaman was removed to hospital from the s.s. *Markhor* when it arrived at Gravesend. He was found to be suffering from advanced pulmonary tuberculosis.

The ship shortly sailed for Bristol and a communication was received from the Medical Officer of Health, Port of London, asking whether arrangements could be made in Bristol for the crew to be X-rayed on arrival.

In due course the *Markhor* docked at Bristol and sixty-one members of the crew were at once conveyed to the Static Mass Radiography Unit in motor coaches provided by the shipowner.

As a result, six members of the crew were recalled for further examination. In one of these, the miniature film suggested active tuberculosis with cavitation.

This ship discharged part-cargo in Bristol and was only in port for three days. After a short voyage to the Continent, she returned to the United Kingdom where arrangements were made for the re-examination of the men by the shipping company who, it is important to record, gratefully acknowledged the help given them in this matter.

Outbreaks of Diarrhoea on Board Ship

During the year attention has turned to outbreaks of diarrhoea on several arriving vessels. A history of diarrhoea, with abdominal pain, sometimes with sickness, is commonplace amongst the crews of ships coming from the Middle and Far East. The following incident prompted the series of investigations commented upon below:

The m.v. *Star of Suez* arrived at Avonmouth on 9th June, 1956, after a ten days' voyage from Alexandria. The passengers and crew were all scrutinised by the boarding medical officer and appeared to be well. A clear "Maritime Declaration of Health" was obtained. The vessel proceeded to Liverpool on the 14th June, thence to Cardiff on 21st June. Shortly after arrival at Cardiff a message was received stating that one of the passengers and her infant son had travelled from Bristol to Jersey one day after reaching Avonmouth and that soon after reaching Jersey, both had been admitted to the Jersey Isolation Hospital as typhoid suspects, the Widal test having been positive in each case. They and other passengers, it would now appear, had suffered from diarrhoea during the voyage from Alexandria. In the absence of any further information, the details were at once posted to Medical Officers of Health advising surveillance in the case of the other passengers and those members of the crew who had gone to their homes. Sometime later, it was learned that the diagnosis of typhoid had not been confirmed bacteriologically. Indeed, the serological results obtained in these cases may well have been compatible with recent T.A.B. inoculation.

Dr. E. Rogan, Assistant Port Medical Officer, reports as follows:

In August of this year, it was decided to commence investigations into the incidence and cause of outbreaks of diarrhoea which occur occasionally on ships. This decision followed outbreaks of diarrhoea in two ships which arrived at Avonmouth from the Middle East; in one of these,

typhoid fever was suspected in a passenger though never proved bacteriologically; in the other, agglutination tests carried out upon a sample of blood taken from a ship's officer, who had recovered from his diarrhoea and was apparently well, were reported to be "diagnostic of present or recent typhoid infection."

All ships boarded at Avonmouth are now particularly checked for patients with diarrhoea. In addition, the Shipping Federation doctors notify the Port Health Authority if they are called to a case of diarrhoea when a ship is in dock. Thus it is hoped to bring all such cases to notice.

Up to the end of December 1956, outbreaks of diarrhoea in ten ships have been investigated and some twenty or so seamen have submitted blood, urine and faecal specimens for laboratory investigation. In these ships the domestic water supply, the galley, and all available food which was used on the voyage are also examined. No definite conclusions have been reached and the investigations are continuing.

The uppermost thought in the minds of sailors on reaching port is to get ashore and home as quickly as possible. Anything which may prevent this is often concealed, and diarrhoea is all too frequently not reported. Then ships spend a very limited time in port and it is the time factor which causes most problems. For lack of time alone, many an investigation cannot be pursued to its ultimate end. Often, where a laboratory report would suggest that further investigation might be of value, this cannot be carried out either because of the departure or the imminent departure of the ship or because of dispersal of the crew.

Notwithstanding these difficulties, it is felt that these investigations are worth while and should be continued during 1957.

SECTION X

Observations on the Occurrence of Malaria on Ships Malaria

(a) s.s. *Elizabeth Holt*. A seaman was removed to the Isolation Hospital from this vessel on arrival in January and was discovered to be suffering from benign tertian malaria presumably acquired in Freetown. He was treated with chloroquin and primaquin, and made a full recovery.

(b) s.s. *Lagos Palm*. This vessel arrived on the 14th August, 1956. Two members of the crew sickened with symptoms of malaria during the course of the voyage: the first at Calabar on July 3rd; the second at Port Harcourt on July 17th. They were treated with quinine, and both were found to be well on arrival.

(c) m.v. *Hindsia*. This vessel arrived from West African ports on August 28th. One member of the crew had sickened with malaria at Lagos on August 10th. He was treated on board with quinine followed by paludrine, and was symptom free on arrival.

(d) s.s. *Lagos Palm*. During a voyage to West African ports, two members of the crew developed malaria, the first at Takoradi on November 15th, the second at Freetown one week later. Both recovered at sea after routine treatment with paludrine and were free from symptoms when the vessel arrived on December 6th.

(e) s.s. *Secondi*. A seaman was transferred from this ship to the Isolation Hospital on June 15th with symptoms of malaria, probably acquired at Takoradi. He had been given routine treatment during the voyage and appeared to be well on arrival, but sickened some days later presumably with a recurrence of the infection.

SECTION XI

Measures Taken Against Ships Infected with or Suspected for Plague

1. All vessels from infected or suspected ports are required to attach efficient rat guards to the mooring ropes.
2. Suitable lengths of tarred hessian are wrapped around moorings outside the leads, when the standard types of rat guards are not available.
3. Arrangements are made to fumigate the vessel with hydrogen cyanide gas when this is desirable.

SECTION XII

Measures Against Rodents in Ships from Foreign Ports**(I) Procedure for Inspection of Ships for Rats**

Routine measures of inspection and rodent control in ships, described in detail in the Annual Report for 1955, were maintained throughout the year.

(a) Foreign-going Ships

Of the 1,485 foreign-going vessels entering the port, 43 were found to have very slight evidence of rats. A further 23 vessels showed signs of rat activity varying in degree from slight to pronounced. Forward notices in respect of 11 of these were sent to Port Medical Officers of terminal discharging ports. Only 5 replies were received, and these stated that after further repressive measures a total of 104 rats (32, 25, 19, 15 and 13 respectively) were destroyed in the 5 ships concerned.

The following table is an interesting one. Particulars are given concerning the degree of infestation in the 23 vessels referred to above, and comparative figures for the years 1954 and 1955 are included.

No. of rats per ship	1956		1955		1954	
	No. of ships	Total rats recovered	No. of ships	Total rats recovered	No. of ships	Total rats recovered
1—5	12	39	15	38	14	26
6—10	4	38	7	58	6	49
11—15	2	23	5	69	2	25
16—20	1	19	3	52	4	77
21—25	2	47	2	44	1	24
26—30	—	—	—	—	1	30
31—35	1	33	2	70	—	—
61—65	1	61	1	64	—	—
77	—	—	1	77	—	—
Totals	23	260	36	472	28	231

During the year, 156 Deratting Exemption Certificates were granted and 5 ships were issued with Deratting Certificates after treatment. Hydrogen cyanide gas was used on three occasions, resulting in the recovery of 20 rats. Two ships were treated with "1080", the sodium fluoroacetate bait, 61 rats being recovered from one of these ships and 33 from the other. The necessary precautions, including cremation of the poisoned rats, were observed on both occasions.

(b) Coastwise Vessels

The *Prevention of Damage by Pests (Application to Shipping) Order, 1956*, came into operation on April 9th. This prescribes a fixed scale of charges before the issue of Rodent Control Certificates. These provisions operated in Bristol from June 1st onwards and the appropriate fees have been charged in respect of 7 ships applying for a certificate. During the year a total of 15 certificates were issued. Regular inspection of the coastwise traders entering the port has shown that they are kept remarkably free from rodents.

(c) Inland Water Craft

A large number of dumb barges have been used for the storage of animal food and cereals. Past experience has shown that rat colonies flourish in vessels of this kind. They also thrive in the floating grain elevators. A careful watch is therefore kept on vessels of this kind, and radical treatment is carried out at the earliest possible opportunity. In this way, a total of 20 rats of the black variety were recovered after trapping, the use of poison bait or fumigation with hydrogen cyanide gas.

(2) Arrangements for the Bacteriological or Pathological Examination of Rodents, with Special Reference to Rodent Plague, including the number of Rodents sent for examination during the year

A routine proportion of all rats recovered is sent for examination for evidence of *B. pestis* to the University of Bristol Laboratories, Canynge Hall, Clifton. Of the 280 black rats obtained from ships and inland water craft, 162 (57 per cent) were sent to the laboratory for examination. All were reported to be free from infection with plague.

TABLE E**Rodents Destroyed During the Year in Ships from Foreign Ports**

Category				Number
Black rats	..	..		260
Brown rats	..	..		—
Species not known	..	..		—
Sent for examination	..	..		146
Infected with plague	..	..		—
Mice	..	..	..	1

TABLE F**De-ratting Certificates and De-ratting Exemption Certificates Issued During the Year for Ships from Foreign Ports**

No. of De-ratting Certificates issued					Number of De-ratting Exemption Certificates issued	Total Certificates issued
After fumigation with		After trapping	After poisoning	Total		
H.C.N.	Other fumigant					
3	—	—	2	5	156	161

TABLE G
Inspection of Ships for Nuisances

Nature of defects and inspections	No. of inspections carried out	Notices served			No. of defects found	Result of serving notices	
		Statutory	In-formal	Forward (PHA's/ MOT)		No. of defects	
						Remedied	Not remedied
Original construction	3,489	—	28	21	11	1	0
Structural wear and tear					216	103	113
Dirt, vermin, etc.					243	217	26
Totals	3,489	—	28	21	470	321	149

(3) Arrangements in the District for De-ratting Ships, the Methods used, and, if done by a Commercial Contractor, the Name of the Contractor

The de-ratting of ships is done by commercial contractors who use hydrogen cyanide gas for the purpose. The undermentioned firms carried out this work at the port during 1956:

London Fumigation Co. Ltd., London.
Fumigation Services Ltd., London.
Associated Fumigators Ltd., London.

SECTION XIII

Inspection of Ships for Nuisances

A total of 470 defects were ascertained and dealt with in 167 British and 31 foreign owned ships during the year. In all, 3,489 visits and revisits were made for this purpose to ships in dock. A satisfying trend observed during the year was the decline in the number of defects of all types discovered, and especially the decrease in the number of defects due to dirt and vermin in British ships.

Of the total of 470 defects, 321 were dealt with locally. Forward notices were sent to other ports in respect of the remainder. The structural defects found in British ships were reported to the Ministry of Transport Surveyor for appropriate action.

A number of the ships inspected employed "special ratings," a term now used to denote Indian and Asiatic seamen. There is a marked improvement in the accommodation provided for these men in the more recently constructed ships, where they have spacious 2- or 4-berth cabins messrooms, and other facilities to meet their special requirements. This enables them to keep their quarters in a much cleaner condition; and the change from badly overcrowded forecastles, which were prevalent, has the effect of improving their general health and well being.

Smoke Nuisances

During the year 37 visits were made to 34 ships in connection with excessive smoke emission. In most cases, all evidence of smoke disappeared within minutes of bringing the matter to the notice of the chief engineer. It is clear from this that insufficient attention is given to the correct and efficient combustion of fuel in ships in port.

The nuisance continued in two of the above ships and return visits were made. It was found that in each case the forced-draught system was under repair.

Hygiene of Crews' Spaces: Vessels Trading Coastwise & Foreign

	British		Foreign		Totals
	s.s.	m.v.	s.s.	m.v.	
Number of revisits to vessels in dock by inspectors	943	1,146	367	1,033	3,489
Number of vessels reported defective	94	48	10	20	172
Number of vessels — defects remedied	81	40	10	19	150

Defects		No. of ships inspected	Original construction		Wear and tear		Dirt and vermin	
Nationality			No. of ships	No. of defects	No. of ships	No. of defects	No. of ships	No. of defects
British	s.s.	459	5	11	38	139	71	134
	m.v.	781	—	—	17	77	36	68
Foreign	s.s.	242	—	—	—	—	11	17
	m.v.	765	—	—	—	—	20	24
Totals		2,247	5	11	55	216	138	243

Defects	Number of defects			Number of defects reported by Forward Notices, etc., to:			Number of ships	
	Found	Rem'd	Not rem'd	Other PHA's	M.O.T. Surv'r	Owner Master	British	Foreign
Original construction	11	1	10	1	1	5	5	—
Wear and tear	216	103	113	5	—	39	55	—
Dirt, vermin and other causes	243	217	26	10	2	12	107	31
Totals	470	321	149	16	3	56	167	31

SECTION XIV

Public Health (Shell-Fish) Regulations 1934 and 1948

No changes have occurred during the year.

SECTION XV

Medical Inspection of Aliens

The organisation of this work is unchanged.

The provisions of the *Aliens Order, 1953*, are in full operation at the seaports and at the Whitchurch airport. The following is a revised list of medical officers holding warrants of appointment as Medical Inspectors of Aliens:

Dr. R. G. Wofinden, Medical Officer of Health.

Dr. P. G. Roads, Deputy Medical Officer of Health.

Dr. D. T. Richards, Senior Assistant Medical Officer (Port).

Dr. E. Rogan, Assistant Port Medical Officer.

Dr. A. Fraser, Assistant Medical Officer of Health.

Dr. J. E. Kaye, Assistant Medical Officer of Health.

**Medical Inspection of Aliens
Annual Return by the Medical Inspector of Aliens for 1956**

	SEAPORT				AIRPORT			
	TOTAL	Number inspected by the Medical Inspector	Number sub-jected to detailed examination by the Medical Inspector	Number of certificates issued	TOTAL	Number inspected by the Medical Inspector	Number sub-jected to detailed examination by the Medical Inspector	Number of certificates issued
(a) Total number of aliens landing at the Port ..	216	216	6	1	459	459	2	—
(b) Aliens refused permis- sion to land by Immigra- tion Officer ..	—	—	—	—	—	—	—	—
(c) Total Aliens arriving at the Port ..	216	216	6	1	459	459	2	—

Total number of vessels/aircraft carrying alien passengers	Inwards		Outwards	
	Seaport	Airport	Seaport	Airport
Number of vessels/aircraft dealt with by the Medical Inspector:	103	142	—	—

SECTION XVI

Arrangements for the Burial on Shore of Persons who have Died on Board Ship from Infectious Disease

No changes have occurred during the year.

SECTION XVII

Other Matters

(1) Water Sampling

Twelve samples of drinking water were obtained from ships during the year.

(a) Routine samples were taken from sandhoppers which trade almost exclusively between the port and the collecting grounds. All of the samples were found to be satisfactory.

Samples were also drawn from the storage tanks of the water boat in the City Docks. One of these was reported as having a rather high bacterial count. The owners were notified and complied readily with a request to have the tanks cleansed. A further sample, taken at the end of the year, showed improvement but there were still organisms present indicative of past pollution. The owners were again requested to have the tanks and pipe-lines chlorinated, and this work is now in hand.

(b) The crew of two ships reported that drinking water, which was stored in the double bottom tanks of these ships, had a distinct and unpleasant oily taste. This was confirmed by the analysis of samples of the water and the owners immediately agreed that the tanks would not be used for water storage until they had been repaired, cleansed and tested. It was later confirmed that this work was carried out at the terminal ports of discharge.

Samples of water were obtained from three other ships upon which passengers and members of the crew were discovered to have been suffering from diarrhoea during the homeward voyage. An undesirably high bacterial count was reported in most of the samples and this warranted the cleansing and cement washing of all tanks in these ships. It was not possible to correlate these bacterial counts with the clinical and serological findings in the cases investigated, or to state with any certainty that the water was the direct cause of the symptoms.

Comment:—The water in the tanks of ships from abroad is derived from a multiplicity of sources, with degrees of purity which must vary considerably. It is not surprising that so many samples are found to be unsatisfactory. Every consideration should be given to the provision of a mechanical filtration unit as a standard fitting in every ship. Nothing short of such an arrangement will ensure a reasonably safe water supply.

(2) Measures against Rodents on Docks, Quays, etc.

This work is well organised. Inspections are planned in close co-operation with the occupiers of premises. It is therefore possible for the rat operators to carry out effective treatment with a minimum of delay, with the result that a "build-up" of infestation is prevented. Poison baits used quite successfully to destroy brown rats, are much less effective for exterminating the black variety. Trapping, which produces much better results, is therefore the method of choice in the control of this species in mills and warehouses. Careful examination has shown that as a result

of frequent trapping there is an appreciable reduction in the black rat population in these premises. Of the 549 rats (346 Black and 203 Brown) recovered by trapping and poisoning, 95 (17 per cent) were sent to the laboratory for examination and all were found to be free from infection with plague.

Category	1956	1955	1954	1953
Black rats	346	426	143	102
Brown rats	203	127	100	71
Total	549	553	243	173
Sent for examination	95	120	62	45
Infected with plague	—	—	—	—
Mice	15	33	53	46

(3) Food Inspection

Approximately 691,000 tons of food intended for human consumption were imported during 1956. There was a reduction in the import tonnage of bananas, dried fruit, dairy products, and cocoa beans, but this was more than compensated by the increase in cargoes of wheat, tea, flour, and meat. All of this food was inspected on arrival; routine sampling was carried out and when necessary the food was subjected to detailed examination.

The first consignment of "deep freeze" food discharged at this port was a matter of some interest. It came from Sweden and comprised vegetables, fruit, chicken, and fish. The "quick" or "deep freeze" method of preserving food is considered to be superior to many other forms as the food is claimed to retain all its freshness and flavour. If there is a sufficient demand for food preserved in this manner, this shipment, which was in the nature of an experiment, may well be the forerunner of many more. Samples sent to the laboratory were reported to be in excellent condition and free from added colouring matter.

Methods of discharging, including the handling and storage of food consignments within the dock are exempt from the provisions of the Food Hygiene Regulations, 1955. Nevertheless, every effort has been made to see that reasonable precautions are taken to prevent damage and contamination. Port authority and stevedoring officials recognise the importance of this and readily co-operate when such precautions become necessary; this is particularly helpful in connection with the discharge and handling of meat and butter cargoes which, because of the nature of the wrappings and containers, require protection and careful handling to avoid spoilage. More than 3,000 carcasses of lamb with dirt-contaminated wrappings were detained during the year because of insufficient care at other ports. A large number of these had to be reconditioned and re-clothed. Fortunately, there was a distinct improvement in the shipments discharged towards the end of the year and it is to be hoped that this will continue.

Polythene, as an inner protective wrapping for imported foods, is becoming more widely used. Frozen small joints and cuts of beef and lamb wrapped in this material and packed in cardboard cartons keep very well, and desiccation of the cut surfaces is considerably reduced. Polythene is a fairly tough material and could be used with advantage as an inner wrapping for sheep and lambs' carcasses. It would protect the meat from dirt contamination; and would also prevent a great deal of evapora-

tion and shrinkage of the commodity during the time when it is stored and transported in air-cooled refrigeration systems.

The provisions of Part IV of the repealed *Food and Drugs Act, 1938*, administered by the Commissioners of Customs and Excise and dealing with the composition and sampling of imported butter, margarine, and other dairy products, were not included in the *Food and Drugs Act, 1955*. Customs officers, who formerly sampled these imported commodities, were therefore directed to discontinue doing so. This work is now the responsibility of port health authorities, and formal samples were obtained from butter, margarine, and cheese consignments during the year. These were found to conform with the requirements of both the new act and the *Food Standards (Butter and Margarine) Regulations, 1955*.

Formal action was taken in respect of the undermentioned:

(a) A consignment of 250 x 30 lb. cartons of Californian sultanas with excess sulphur dioxide, the detention of which was referred to in last year's Annual Report, was re-exported to the Continent.

(b) Extensive bad weather and sea water damage resulted in the detention of 9,561 cartons of canned fruit and 103 cartons of canned salmon (part of a shipment from the United States of America) for complete examination. Sorting, followed by reconditioning or the rejection of tins was carried out under our supervision.

(c) Initial inspection of the cargo hold of a ship from E. Africa showed that a consignment of 2,000 chests of tea, stowed alongside insect-infested animal feeding stuff, had become infested with beetles (*Tribobrium Confusum*). The possibility that these non-boring insects might have invaded the chests could not be ignored. A large number of chests were opened but no trace of the insects could be discovered in the tea. However, the degree of external infestation was such that disinfestation had to be carried out before storage in a warehouse could be permitted. The consignment was successfully treated by being loaded into a barge followed by exposure to a high concentration of ethylene oxide/carbon dioxide gas which, although harmless to most foodstuffs, is a very effective insecticide.

(d) A high percentage of blown tins was discovered in a consignment of 100 cartons (24 x 1 lb. tins) of canned stringless beans from Kenya. A detention notice was served on the importers who were directed to re-export or surrender the goods for destruction. They chose the latter alternative and the tins were destroyed under supervision.

(e) Due to a latent structural defect which allowed fuel oil to seep into a cargo hold containing butter, 1,650 x 56 lb. cartons were detained for examination. The volatility and viscosity of the oil were so affected by the low temperature in the hold that no trace of oil taint was detected, and oil contamination was confined to a relatively few cartons. These were destroyed and the butter repacked in new containers.

Potatoes

To meet the possibility of a serious shortage there was a considerable increase in the importation of potatoes from the continent. As the supply was in excess of demand, the potatoes deteriorated during the period of storage, which extended from April to mid-summer. Several tons were condemned as being totally unfit and the remainder were re-exported for use as animal food.

Eggs

Three shipments of Australian frozen whole eggs imported by the Ministry of Agriculture, Fisheries and Food, were discharged at Avonmouth during the year.

At the request of the Ministry, the first two were permitted to be dispatched direct, ex-ship, to cold stores at Cardiff and Northampton. The Medical Officers concerned were advised of this arrangement and that no samples had been taken.

The other shipment, 12,000 x 28 lb. tins, originating from three different packing stations and comprising 78 batches, was stored at Union Cold Stores, Bristol. *Of the 220 samples subsequently taken, 9 were contaminated with salm. typhimurium.* These involved a total of 1,375 tins from 7 different batches, which will be subject to controlled measures when allocated to the trade. The remainder were released without restriction.

Bananas

Large banana imports continued to arrive throughout the year and inevitably, on arrival, some of the fruit was found to be overripe for normal trade distribution.

As in past years, Messrs. Elders & Fyffes released such over-ripe fruit to the hospitals and institutions named below. The firm's generosity in this respect is again very much appreciated.

Dr. Barnado's Homes.	Children's Hospital.
Hortham and Brentry Hospitals.	Frenchay Hospital.
Health Department Day Nurseries.	Ham Green Hospital.
Corporation Children's Committee.	Southmead Hospital.
Muller's Homes.	

(4) Dock Sanitation

Canteens

There are now eight food catering premises and one mobile canteen serving the general public within the dock area. One is a small wooden structure for supplying tea and wrapped confectionery only. The remainder are staff canteens attached to business premises. These were all visited early in January in order to acquaint the owners, where necessary, with the requirements of the *Food Hygiene Regulations, 1955*, some sections of which were enforceable on January 1st, 1956, and the remainder from July 1st onward.

Most of these canteens are fairly new, or have been reconstructed within the last few years, and are equipped satisfactorily; but in some cases it was necessary to send notices in connection with such matters as:

Lack of constant supply of hot water, soap, etc., for wash-	
hand basins	3
Fixing of notices requesting personal cleanliness of staff ..	5
Providing first-aid material	5
Storage of food so as to prevent contamination	2
Proofing of building to prevent access of birds	1

The owners readily met these requirements.

The mobile canteen, which is used at irregular intervals, and the wooden structure already referred to, are provided with a sufficient supply of clean cups from the main canteens. The owners were informed that such an arrangement must be maintained at all times otherwise the provisions of the Food Hygiene Regulations applicable to "stalls" would be enforced.

Refuse

A total of 4,685 lorry loads of ship, trade and general refuse weighing approximately 9,100 tons was collected from the docks for controlled disposal. The staff of the City Transport and Cleansing Department, who carry out this work, were most co-operative and arranged the frequency of collections in such a way that nuisances were minimised.

Meats (Condemned)

Description	Decomposition and mould				Brine stain				Contamination and taint				Total			
	T.	C.	Q.	lb.	T.	C.	Q.	lb.	T.	C.	Q.	lb.	T.	C.	Q.	lb.
Beef ..	2	3	2	13				—				—	2	3	2	13
Lamb ..		5	2	00				—				22		5	2	22
Mutton ..		12	1	10				—			1	10		12	2	20
Pork ..		3	1	21				—				—		3	1	21
Veal ..			1	06				—				—			1	06
Offal (Beef)		2	3	26				—				—		2	3	26
Total	3	8	0	20				—			2	04	3	8	2	24

Canned Goods (Condemned)

Description	Reason for condemnation	Quantity (tins)	T. C. Q. lb.			
			T.	C.	Q.	lb.
Canned fruit	Blown, crushed, rust holed, burst and pierced tins ..	5,242	4	4	0	6
Canned meats	Blown, crushed, rust holed, burst and pierced tins ..	1,852		13	1	7
Canned fish	Crushed and burst tins ..	892		4	0	3
Canned jams	Crushed and burst tins ..	20			1	12
Canned tomatoes	Crushed, blown, rust holed and burst tins	1,607		8	2	3
Canned tomato juice	Crushed, rust holed and burst tins	1				10
Canned milk	Blown, crushed and burst tins	—				—
Canned vegetables	Blown, crushed and burst ..	2,486	1	2	2	16
Canned fruit juice	Blown, crushed, burst and rust holed	276		3	0	22
Condiments (chutney)	Broken bottles	1,726		10	3	15
Totals		14,102	7	7	0	10

Miscellaneous Foods (Condemned)

Description	Reason for condemnation	T.	C.	Q.	lb.
Barley	Oil contaminated	2	0	0	0
Bread Improver	Grossly contaminated		1	2	20
Cereals	Insect infested		1	0	10
Cheese	Contaminated				10
Chocolate					
couverture	Contaminated			3	11
Confectionery	Contaminated				7
Desiccated coconut	Grossly contaminated and insect infested		2	1	13
Dried fruit	Mouldy	1	15	3	2
Flour	Mouldy and insect infested	2	4	3	14
Fresh fruit (pears)	Decomposed		7	1	0
Fresh vegetables					
(marrows)	Decomposed		3	0	0
Lard	Dirt contaminated		8	2	1
Margarine	Contaminated		1	0	8
Potatoes	Decomposed	7	2	0	0
Rice	Mouldy and dirt contaminated	1	13	0	3
Tea	Mouldy and water damaged	1	6	0	8
Tomatoes (fresh)	Decomposed		13	3	16
Wheat	Decomposed, oil and water damaged	66	11	1	17
	Total weight	84	13	0	0

Particulars of Foods Detained for Re-exportation or Reconditioning at Local or Other Food Depots

Description of food	Reason for detention	Tons (approx.)
Desiccated coconut	Contamination and mould	5
Butter	Oil taint	42
Canned fish	Rusty condition of tins	2
Tea	Mould contamination, wet damaged, insect infested	179
Canned fruit	Sea-water damaged	379
Lard	Overheating (?) rancidity	25
Bottled condiments	Broken bottles	9
Flour	Water mould and dirt contamination	94
Lamb	Mould and dirt contamination	53
Pork	Dirt contamination	2
Mutton	"	1
Dried fruit	"Fermentation", mould, water damaged and excess SO ₂	11
Canned tomatoes	Seawater (rust) damaged	1
Canned vegetables	Excessive number blown tins	1
	Total weight	804

**Samples of Imported Foodstuffs taken during 1956,
and Sent for Examination by the Analyst or Bacteriologist.**

No. of Samples	Description of commodity	Country of origin	Exam. for*	Result
4	Apples (fresh)	Italy	C.(spray)	Satisfactory
1	Apricots (canned)	Australia	M.	"
4	" " " "	S. Africa	M.	"
1	Asparagus " " " "	Australia	S.	"
2	Bananas (fresh)	W. Indies	S.	"
2	Beans (canned)	Cyprus	B.M.	"
20	" " " " " "	Rhodesia	B.M.	12 unsatisfactory
3	Beef minced loaf (canned)	Australia	B.	Satisfactory
4	Beef Steak " " " "	Australia	B.	"
1	Bread Improver	Holland	S.	"
3	Butter	Australia	Comp.	"
12	" " " " " "	N. Zealand	Comp.	"
6	Cheese	N. Zealand	Comp.	"
2	Cherries (canned)	Italy	B.M.	"
2	Citrus Peel	S. Africa	P.	"
1	Cockles (salted) (canned)	Holland	B.	"
6	Corned Beef (canned)	Argentina	B.M.	"
9	" " " " " "	Australia	B.M.	7 unsatisfactory
8	Crab " " " "	Japan	B.M.	Satisfactory
1	Crawfish " " " "	S. Africa	M.	"
4	Currants	Greece	P.	"
1	Dried Fruit (mixed)	S. Africa	P.	"
226	Eggs (frozen whole)	Australia	B.	9 unsatisfactory
1	" " " " " "	Ireland	B.	Satisfactory
2	Fruit Cocktail (canned)	U.S.A.	M.	"
1	Fruit Salad " " " "	U.S.A.	M.	"
1	Gooseberries " " " "	S. Africa	M.	"
1	Grapes " " " "	Cyprus	M.	"
1	Grapefruit " " " "	Cyprus	M.	"
1	" " " " " "	Jamaica	M.	"
1	" " " " " "	S. Africa	M.	"
6	" " " " " "	U.S.A.	M.	"
1	" (juice) " " " "	Jamaica	M.	"
4	" (fresh) " " " "	Israel	P.	"
1	Guavas " " " "	S. Africa	M.	"
1	Lemons (fresh)	Italy	Th.	No trace
3	Maize	U.S.A.	S.	3 unsatisfactory
4	Margarine	Holland	Comp.	Satisfactory
3	Milk (dried)	Australia	S.	"
1	Oleo Oil	U.S.A.	C.	"
36	Oranges, Mandarin (canned)	Japan	M.	"
21	" (fresh)	Israel	Th.	No trace
90	" " " " " "	Spain	Th.	" "
9	" " " " " "	U.S.A.	Th.	" "
1	Pangrease Emulsion	Holland	B.	Satisfactory
1	Peaches (canned)	Australia	M.	"
7	" " " " " "	S. Africa	M.	"
6	" " " " " "	U.S.A.	M.	"
5	Pears " " " "	Australia	M.	"
3	" " " " " "	S. Africa	M.	"
3	" " " " " "	U.S.A.	M.	"
1	Peas (deep frozen)	Holland	S.	"
16	Pilchards (canned)	S. Africa	S.	"
6	Pineapples " " " "	Malaya	M.	"
4	" " " " " "	S. Africa	M.	"
2	Pineapple juice (canned)	Australia	M.	"
1	" " " " " "	S. Africa	M.	"
6	Pork (chopped) (canned)	Holland	S.	"

Samples of Imported Foodstuffs (continued)

No. of Samples	Description of commodity	Country of origin	Exam. for*	Result
2	Raisins	S. Africa	P.	Satisfactory
10	"	U.S.A.	P.	
1	Rice	Argentina	S.	
3	Salmon (canned)	Canada	M.	"
26	" "	Japan	M.	"
2	" "	Norway	M.	"
10	Sardines "	Portugal	M.	"
1	Steak & Kidney Pudding (canned)	Australia	S.	"
2	Steak & Vegetable (canned)	Australia	M.	"
3	Stewed Steak (canned) ..	Australia	S.	"
1	" " " ..	Ireland	S.	"
16	Sultanas	Greece	P.	13 unsatisfactory Satisfactory
2	Sweetcorn (canned) ..	S. Africa	M.	
2	Tea	Ceylon	S.	"
1	"	India	S.	"
2	"	Kenya	S.	"
58	Tomatoes (canned) ..	Italy	M.	"
1	Tomato Juice " ..	Israel	M.	"
2	" " " ..	Italy	M.	"
4	Tongues (Ox)	Holland	S.	"
4	Veal & Pork (canned) ..	Holland	S.	"

*Key Examined for:
B. Bacterial contamination.
C. Chemical contamination.
Comp. Composition.
M. Metallic composition.
P. Preservatives.
S. Soundness or purity.

Drinking Water Samples from Ships

Name of ship	Results
Araby	Unsatisfactory
Ajana (2 samples)	Satisfactory
	Unsatisfactory
Camerton	Satisfactory
City of Yokohama	Unsatisfactory
Medway (2 samples)	"
Portway	Satisfactory
Steepholm	"
Tamsinia	Unsatisfactory

THE WILLIAM BUDD HEALTH CENTRE

(1955-1956)

Administration

The end of the fourth year sees the Health Centre activities running smoothly on well established lines, thanks to the excellent spirit of co-operation shown by all concerned. The routine administration of the Centre has continued without incident under the efficient charge of Sister Padfield and her assistants.

During the year, four House Committee meetings were called; they were held on 3rd and 31st October, 1955, and the 9th January and 28th May, 1956. The meetings were held mainly to discuss new developments.

Staffing Arrangements

Once again there have been a number of staff changes. The most important item of news in this respect was the resignation of our Sister-in-Charge in July, 1956, to take up an appointment in the Middle East. Our very best wishes go to Miss Padfield to whom much of the credit for the smooth running of the Centre is due. A successor has been appointed—Miss Balsdon—who will take up her duties in November. Miss Balsdon is no stranger to Bristol, having been a Health Visitor and Clinic Sister in the Health Department for a number of years.

Miss A. M. Cooper, the Deputy Sister-in-Charge resigned in April, 1956, and her place was taken by Miss M. M. Davies. In August 1955 Miss M. E. Callow, who at one time served as a domiciliary midwife in Bristol, took up her duties as a Clinic Nurse; Miss E. G. Davies, a clinic nurse retired in December, 1955.

Two changes occurred on the clerical staff. In December 1955, Miss Chaplin was transferred to Central Clinic and was succeeded by Miss P. Stadward.

Group Insurance

Consideration has been given to group insurance. The solicitor's opinion on the question of risk of personal injury to patients, was that such injury may well be covered by the indemnity given by the Corporation to the Executive Council.

The medical practitioners at the Centre, have individually extended their existing professional insurance to cover their liabilities to indemnify the Executive Council for any loss, damage or injury sustained by or to patients whilst at the Centre. With regard to liability for damage to the Centre, the furniture or fittings, a group insurance for £10,000 has been taken up.

Developments

(a) Nutrition Clinic

Since September 1955, an additional weekly session has been given to the Nutrition Clinic at the Centre. This is an evening session which is more convenient for those patients who are normally at work during the daytime.

During the year, there were 500 attendances at the Nutrition Clinic and 135 new patients were seen. Many of these sought advice solely on

account of overweight, without delaying until it precipitated some other malady. It would seem therefore that people are becoming more conscious of the harmful effects of overweight and are more ready to seek advice and take some positive action. This is encouraging as it indicates a receptive state of mind and presents an earlier opportunity for the teaching of food values and a more sound basis for the establishment of good feeding habits.

(b) *Psychiatric Social Work*

The second year of psychiatric social work in the William Budd Health Centre has been somewhat disappointing, as numbers have dropped considerably. Thirty cases have been referred; 9 by the Centre G.Ps., 13 by Infant Welfare Clinics and health visitors, 2 by other patients and 6 from G.Ps. outside the Centre.

Of these 30, 16 have improved with treatment and supervision from the psychiatric social worker and in 5 instances, with additional help from outside agencies, such as the Day Hospital, a Psychiatrist, help from the School Health Service in placement of a child, also placement in new work for a mother, and holidays arranged for mothers by the Bristol Council of Social Service.

Of the remaining 14 cases, 5 are I.S.Q., through unattainable factors in the patient's own personality or in their home situations. In 9 cases, the present situation is unknown as they have failed to keep appointments or to answer letters. One of the outstanding features of the adult cases referred by G.Ps. and other patients, is the symptoms of depression and/or anxiety in quite young married women. The psychiatric social worker has had 6 referred during the year and in each instance, it has been possible to carry the case with the G.P. and/or a psychiatrist at out-patients' departments without their needing to be transferred to a Mental Hospital. The assistance of a psychiatrist in some of these cases is essential. Some families seen in 1955, have still continued to come at intervals, but the above details concern only the cases referred in 1956.

The further disappointing factor has been the very high number of failed appointments. Of a possible 192 interviews, 59 have been failed. Sometimes this is naturally on account of illness or family ties, but often there is no explanation, and no response to letters.

The more hopeful side of the work has been in the increased amount of time spent in discussion with health visitors, this often covering families who are never referred to the psychiatric social worker. The monthly case discussions have continued usefully and, when no urgent case has come up, we have talked around a specific subject, such as enuresis.

The psychiatric social worker from the William Budd Health Centre and one from another district have given short talks to School Medical Officers at the Central Health Clinic on the subject of their work and joined in the discussions following.

(c) *Electrocardiograph*

During the year, a new electrocardiograph was acquired; this has proved of tremendous value and saves referring certain patients to hospital. The members of the nursing staff were trained to use the machine and for each E.C.G., consultant opinion is obtained.

Although the case for further diagnostic facilities for the Centre has been continually urged, it is regretted that no further progress has been made.

General Practitioner Work

(a) On 31st July, 1956, there were 11,380 patients registered at the Centre—a slight increase over the previous year.

(b) Patients Attendances at the Centre

Table 1 shows the attendance by each quarter for each general practitioner form for 1954/55 and 1955/56.

Table 1

Attendances by each Quarter for General Practitioner Firms at the William Budd Health Centre.										
Doctors	1st		2nd		3rd		4th		Total	
	Aug.— Oct. 1955	Aug.— Oct. 1954	Nov.— Jan. 1956	Nov.— Jan. 1955	Feb.— April 1956	Feb.— April 1955	May— July 1956	May— July 1955	1955/56	1954/55
A	3,061	3,186	3,455	3,478	3,717	3,914	3,295	2,941	13,528	13,519
B	447	453	463	519	518	554	429	417	1,857	1,943
C	2,185	1,986	2,356	2,122	2,376	2,269	2,026	1,955	8,943	8,332
D	1,128	1,083	1,152	1,324	1,252	1,318	1,016	1,014	4,548	4,739
E	1,194	1,196	1,346	1,387	1,492	1,450	1,309	1,099	5,341	5,132
Totals ..	8,015	7,094	8,772	8,830	9,355	9,505	8,075	7,426	34,217	33,665

(c) Minor Surgery Treatments

Table 2 shows the volume of work undertaken by the nursing and medical staff in the minor surgery theatre.

Table 2

Treatments given for General Practitioners at the William Budd Health Centre.										
Doctor(s)	1st		2nd		3rd		4th		Total	
	Aug.— Oct. 1955	Aug.— Oct. 1954	Nov.— Jan. 1956	Nov.— Jan. 1955	Feb.— April 1956	Feb.— April 1955	May— July 1956	May— July 1955	1955/56	1954/55
A	808	871	564	801	460	906	600	854	2,432	3,432
B	58	86	18	107	18	80	41	20	135	293
C	656	640	472	578	390	526	307	597	1,825	2,341
D	74	49	28	60	42	31	26	29	170	169
E	272	286	200	236	193	397	214	268	879	1,187
Totals ..	1,868	1,932	1,282	1,782	1,103	1,940	1,188	1,768	5,441	7,422
Schools ..	125	184	72	50	54	73	72	64	323	371
Casuals ..	71	89	32	42	35	54	47	77	185	262
Full Total ..	2,064	2,205	1,386	1,874	1,192	2,067	1,307	1,909	5,949	8,055

The trend observed in 1954/55 has continued in 1955/56, the decline in the number of treatments being very marked despite the increased number of patients at risk. As suggested in the last annual report it may well be that patients are helping themselves rather more than they did in the past.

(d) *General Practitioner—Maternal and Child Welfare Work*

During the year, general practitioners held 150 ante-natal sessions and 1,039 attendances were recorded.

(e) *General Practitioner References to Hospital Specialist and Diagnostic Units*

Table 3

No. of Patients Referred to Hospital Specialists (All Doctors)							
Months	Orthop.	Paed.	Phys.	Surgs.	E.N.T.	Gyn.	Total
Aug., 1955— July, 1956..	93	58	407	224	241	179	1,202
Aug., 1954— July, 1955..	75	39	363	119	137	74	807

Table 4

Patients Referred to Hospital Diagnostic Units (All Doctors and Local Authority)					
Months	Chest X-ray	Haemoglobin	Blood Count	E.S.R. B.S.R.	Urine
Aug., 1955— July, 1956..	252	152	37	—	174
Aug., 1954— July, 1955..	351	124	79	—	151

Local Authority Work

(a) *Maternal and Child Welfare*

Fifty-two Local Authority doctors' sessions were held for seeing expectant mothers. Some 427 attendances were made, *i.e.*, an average of 8 per session. In addition, district midwives held 50 ante-natal sessions at which 603 attendances were made.

(b) *School Health*

Seventy-three sessions were held by the school doctor at which 572 new children were seen. The number of attendances made by the children was 814, the average attendance being 11.

HEALTH EDUCATION

P. Mackintosh

(Health Education Officer)

In many ways, 1956 was an eventful year for the development of health education in Bristol. Since 1949, one officer was responsible for arranging and co-ordinating all health education work; in 1956 however, a small section was set up consisting of the Health Education Officer, a Technical Assistant, Miss Marion Finch, M.A. who was recruited in October, and the Nutritionist, Miss Chapman. The formation of the section has meant that more assistance and guidance can now be given to all those members of the Health Department who participate in health education and it has been possible to develop new projects and ideas.

Visual Aids and Exhibitions

There has been an increasing tendency for health visitors and public health inspectors to make use of visual aids when giving talks on health topics. The film strip is a very popular medium and early in the year we were able to equip the remaining five clinics with film strip projectors as well as to provide separate projectors for the Environmental Hygiene Section and the Health Visitors' Training School. Each clinic now has several film strips on maternal and child welfare and certain film strips have been allotted to the public health inspectors. In addition, over one hundred film strips are located at the Central Clinic and these are issued on loan to the clinics as required.

The sound film equipment has been in constant use, over 200 film shows having been given during the year. The film "My First Baby" was added to the film library, and this film has been brought into use in the parentcraft classes which are organized for expectant mothers.

In the 1955 annual report, reference was made to a proposed new film which was to be made as a result of discussions at the Public Health Inspectors Refresher Course. In January of this year, the film, "Food without Fear" was shown for the first time in London, and shortly afterwards the Health Department acquired a copy for use in Bristol. This film has been used extensively to illustrate the many talks which have been given to the staffs of catering establishments, and hospital catering staffs.

The policy of the Health Department has always been that health education is a subject which must be kept constantly before the public. With this end in view the Health Committee, agreed to the purchase of a new exhibition stand. The stand is of contemporary style and constructed of pegboard. It is so designed that it is readily adapted to take any number of different health topics. The first topic dealt with atmospheric pollution and this has been shown to very great effect in the showroom windows of the South Western Electricity Board and the South Western Gas Board. The stand was next used to highlight the problem of accidents in the home and was erected in the Conference Hall of the Council House when a meeting was held in December to discuss the possibility of setting up a Home Safety Committee.

By the end of the year, plans were well advanced on the design of another form of exhibition stand—pegboard tryptich panels, suitable for large or small displays and designed for use either in clinics, conference

rooms or large shop windows. Tentative arrangements have already been made with the Director of the City Museum for these panels to carry a display on "Infectious Diseases" and for the exhibition to be shown for one month in the Museum.

By these methods, we hope to build up a display and exhibition service, where any one of a number of health topics can be supplied at short notice, and suitable for showing in shop windows, conference rooms, libraries, clinics and at gatherings of the many "ready-made" groups of individuals that exist in Bristol.

Refresher Courses

Three refresher courses were held for members of staff during the year. From the 9th to 13th April, a refresher course was arranged for officers engaged in the various branches of the Mental Health Service. The course was open to officers of other local authorities and hospitals. The theme of the course was "Community Aspects of Mental Health" and the speakers dealt with normal groups, abnormal groups and special groups. Visits to two mental hospitals and to an industrial rehabilitation unit were included.

This course was followed immediately by a week-end course for public health inspectors and was open to members of the South Western Centre of the Association of Public Health Inspectors. The programme was a concentrated one and included papers on such topics as "The Public Health Laboratory Service, with Special Reference to Samples Submitted by Public Health Inspectors"; "Food and Drugs (Consolidation) Act"; "Enforcement of the New Clean Food Regulations"; "The New Clean Air Act"; "Atmospheric Pollution" and "The Measurement of Atmospheric Pollution".

The course held jointly with Glamorgan County Health Department was again very successful. Ten Bristol health visitors attended the Glamorgan course in the spring, and in the autumn, ten Glamorgan health visitors came to Bristol for a week's residential course with a party of Bristol health visitors. The programme arranged was a varied one and included such topics as "Health and Social Problems on a New Housing Estate"; "Modern Trends in Ascertainment and Control of Tuberculosis"; "Ante-Natal Care and Toxaemia in Pregnancy"; "Extra Mural Psychiatry"; "Diagnosis and Management of Spastics", and a new departure, "How to Speak Effectively in Public". A teaching round in the Royal Hospital for Sick Children was arranged and there were visits to see a laundry service for old people, the Claremont School for Spastic Pupils and a day hospital.

Four groups of third year medical students attended the pre-clinical course in social medicine, organized by the Health Department. The students attended in April and June and July and September; the courses consisted of lectures and visits and included such subjects as "The Problem of the Aged", "Housing", "Environmental Hygiene" and "Mental Health".

Monthly Bulletin

For a number of years the Health Department have issued a "G.P.'s Bulletin". It consisted of stencilled foolscap sheets and contained a number of notices of interest to general practitioners. It had no precise form and was not issued at regular intervals. It was felt that with some improvements, this bulletin could be converted into an extremely useful

and effective health education medium. After some discussion, the final product took shape; the new bulletin appeared as a stapled quarto size booklet, typed in italics with illustrations produced with photo-stencils; it is now referred to as the Monthly Bulletin of the Medical Officer of Health; it has a simple but distinctive cover and it appears regularly each month. Each issue contains one or two leading articles, a statistical section presented attractively in graphical form and written up in an understandable manner and a section devoted to reports and notices of various meetings, campaigns, visitors to the Department, etc. The Bulletin now reaches, not only every general practitioner in the City, but members of the Health Committee, doctors and nurses in the hospitals, the three local papers, the B.B.C. and several Medical Officers of Health of other local authorities. Within the Department, copies go to each clinic, all the medical officers and to the heads of sections in the administrative staff.

The Bulletin appeared in its new form in October, the leading article being an account of the Occupational and Industrial Centre for Mental Defectives in Bristol. In November, Dr. MacFarlan contributed the leading article on "Progress in the Control of Tuberculosis in Bristol" and in the following month Dr. Smallwood, S.M.O. School Health Service, wrote about "Cerebral Palsy in Bristol". The programme for 1957 has already been drawn up, but it is sufficiently flexible to allow for last minute contributions of a particularly topical nature.

Without doubt the Bulletin is a success—at the time of writing, in 1957, it has continued to appear regularly and the numbers distributed have increased each month, from 400 with the first issue to 600, six months later. The interesting and very encouraging factor is that through this medium we are able to impart information concerning health to a very much wider audience than the circulation figures infer, and for this we have to thank the local press. Each of the three local papers have, each month given considerable publicity to items in the Bulletin, so that the number of people reached is more that approaching the combined circulation figures of these newspapers—245,000 persons, and their families.

Prevention of Accidents in the Home

For some time the Health Committee have been interested in the possibility of setting up a Home Safety Committee. The subject of Home Safety has, hitherto been included in the health education programme and health visitors in particular have given many talks on the subject in clinics, in schools and to women's organizations.

On 12th December an invited audience of approximately 100 people met at the Conference Hall in the Council House. The audience represented every women's organization in the City, the hospitals, the Education and Housing Departments, the South Western Gas and Electricity Boards, many men's organizations, the Red Cross, the St. John's Ambulance Brigade and Association, in fact any organization or group of people who were interested in and prepared to do something about the prevention of accidents in the home. The Lord Mayor, the Right Hon. Alderman G. A. Watson Allen took the Chair and introduced the speakers.

Miss Barbara Naish of the Royal Society for the Prevention of Accidents spoke of the national problem of home accidents; Dr. Roads, Deputy M.O.H. gave the results of a home accident survey carried out by the Health Department and finally a surgeon gave the hospital surgeon's

view of home accidents. This talk was illustrated by many coloured slides showing the frightful results of accidents. The slides did more than anything else to bring home to the audience the seriousness of the problem. At the end of the meeting and after general discussion it was decided to set up a Home Safety Council, to be sponsored by the Health Committee and with the secretarial duties undertaken by the Health Department.

The Bristol Home Safety Council met for the first time on 30th January 1957 to elect officers and a committee which should meet once each month. It is obvious, even at this early stage, to see that this new Council will be an extremely active one and that the member organizations will do everything possible to build up a body of informed public opinion on the subject of home accident prevention.

Visitors to the Department

Space does not permit the naming of each visitor to the Department during the year. Suffice it to say that they were very many and came from places as far apart as South Africa and Sweden, Barbadoes and Bangkok, Japan and Norway. Many of these visitors were W.H.O. Scholars and programmes of study and visits were made for each one. Some of the visitors came for one day only, many stayed for one or two weeks and several were attached to the Department for a month.

It is most enjoyable to meet these visitors, because it is not only they who benefit from the visit; each member of the Department who meet them gain in knowledge too, and often the interchange of ideas makes us wonder, in the words of a famous American "Are things 'all right' in our own back-yard?"

PUBLIC HEALTH LABORATORY UNIVERSITY OF BRISTOL

Dr. H. R. Cayton

(Deputy Director, Public Health Laboratory, University of Bristol)

The casual readers of repetitive annual comments may have noticed that, while much of what was recorded with respect to "Food Poisoning" varied little from year to year, the list of exotic names attached to the *Salmonella* strains isolated has extended and altered. The notable exception *Salmonella typhimurium* has retained its pre-eminence.

The sudden appearance of cases of infection due to *Salmonella* species of rare types, e.g. *Sal. saint paul* or *Sal. heidelberg*, undoubtedly indicate the dissemination of some food substance containing the infective agent. This suggestion is strengthened when, simultaneously, apparently sporadic cases appear in different towns. Past experience focuses our attention on meat and meat products and confectionery, but only infrequently do we succeed in identifying the definite food.

During the war many new and uncommon types of *Salmonella* were introduced into the country in spray-dried imported egg and many "incidents" were recorded. In recent years frozen liquid egg has been imported in greater quantity. The size of the tins ensures that only the larger bakeries make use of the product. An outbreak of paratyphoid fever (Newell, 1955) associated with the use of imported frozen liquid egg has directed attention to this source of food poisoning bacteria and extensive investigations have been carried out.

Bulked egg and egg products are now known to be the foodstuff most often the source of infection, the frequency and degree of contamination varying with the methods of the exporting country. An egg is safe—mix a hundred thousand eggs and the product is very probably unsafe. An example will make the situation clearer.

A consignment of Australian frozen liquid egg imported through Avonmouth was sampled and examined with the following instructive results:—

<i>S.S. Napier Star</i>			
Tins sampled	..	..	362
Tins negative	..	..	341*
<i>Strains isolated—</i>			
<i>Salmonella typhimurium</i>	..		14
„ <i>hessarek</i>	..		4
„ <i>cambridge</i>	..		1
not identified	..		2
			—
			21
			—

* *Salmonella pullorum* was often found, but this common infection of fowls is usually regarded as harmless to man and has not therefore been recorded.

In addition to the obvious dangers of contamination from using these products as food, two additional riders to the proof may be made. The first, which cannot be too frequently emphasised, is that adequate sampling of large masses of food is essential if a valid conclusion is to be drawn. In this example 362 tins each weighing 22 lb. were examined; 362 was less than a 5 per cent. sample of the whole consignment and the laboratory examination was confined to less than 5 per cent. of any tin sampled. Certainly twenty tins could be examined before a “positive” result was recorded. Too often inspectors take token samples which are far too small numerically to be significant. A planned investigation of a few specific imports at different centres would certainly be a better use of the resources of the Health Authorities than the routine production of the odd tin.

The second conclusion to be noted is that since bulked imports of animal origin handled in bakeries and food processing plants involve the periodic contamination of equipment and premises, efforts to devise practicable methods of ensuring the proper cooking of food and its safe handling are more likely to bring useful results than the casual investigation of “incidents” as they occur. Milk and water are no longer likely sources of infection for most of us. “There’s safety in numbers” does not yet apply to eating but the efforts that have produced a safe milk may ultimately contribute to safe food.

DISEASES OF ANIMALS—1956

Lt.-Col. D. I. C. Tennant, M.R.C.V.S.
(*Inspector under the Diseases of Animals Act*)

Swine Fever Order, 1938

There has been no outbreak of swine fever within the city boundary during the year.

Movement of Swine Order, 1952

During the year 583 store pigs and 26 sows with litters were licensed out of Bristol cattle market. Some 6,347 store pigs arrived in the City under license and were inspected during the 28 days' period of detention and isolation. There has been a marked fall in pig-keeping generally, owing to the very low margin of profit on finished pork and bacon pigs. The majority of pig-keepers in the City are smallholders, keeping pigs in their spare time, and unless they can see an adequate reward for their labour they give up keeping pigs until the trade improves.

Fowl Pest

There has been no outbreak during the year. The incidence of this disease has declined in the country as a whole and the restrictions on the movement of poultry have been removed except in Kent and Lancashire, where the disease seems to remain endemic.

Tuberculosis (Area Eradication) Order

The free testing scheme introduced by the Ministry of Agriculture, Fisheries, and Food has proved a great success in the neighbouring counties of Somerset and Gloucestershire. All herds that are not attested have been tested at least once, and some have been tested more than once, depending on the co-operation of the farmer in getting rid of the reactors. It seems likely, as forecast in my last report, that Somerset will become an Eradication Area in March 1958 and Gloucestershire the following year.

Foot and Mouth Disease

The year was an anxious one, with a large outbreak in the Forest of Dean that spread into South Wales and Gloucestershire. The outbreak began in July and was not stamped out until the end of August. In the month of September an outbreak occurred within the city limits at Bishopsworth. There was however no connection with the original outbreak in the Forest of Dean. The Bishopsworth outbreak occurred on a butcher's farm and was traced to imported Argentine meat, the virus being type (C). This is usually associated with imported meat of Argentine origin.

The Ministry of Agriculture, Fisheries, and Food took control of the outbreak and slaughtered 38 cattle and 17 pigs. The disease was confined to the farm and there was no spread. Restrictions were removed in a month, and restocking of the farm was permitted after three months.

Transit of Animals (Amendment) Order, 1931

Due to the prevalence of foot and mouth disease, very strict precautions were taken to ensure the proper disinfection of road vehicles used for the transportation of animals to the abattoirs and bacon factories within the City. The police gave great assistance in the enforcement of this order. Where adequate facilities did not exist at the smaller bacon factories for the disinfection of vehicles, the driver of the vehicle was directed to the public abattoir at Gordon Road so that the vehicle could be disinfected under supervision.

CIVIL DEFENCE RESPONSIBILITIES OF THE MEDICAL OFFICER OF HEALTH

Dr. H. Temple Phillips
(*Chief Assistant Medical Officer of Health*)
and E. G. H. Spencer

The Civil Defence responsibilities of the Medical Officer of Health remained the same during the year under review and although no additional duties were added to the functions of the Department, changes in operational control necessitated a revision of planning and, to some extent, a different approach to training.

Because of the threat of bombardment by megaton weapons, the Home Office reconsidered the whole system of Civil Defence Operational Control and, after consultation with Local Authority associations, it was agreed to set up Sub-Regions in likely target areas to ensure unified direction of operations.

Each Sub-Region is to have a Sub-Regional Controller appointed by the Central Government, in consultation with Corps Authorities and he will be responsible, in war-time, to the Regional Controller.

A Sub-Region has been set up for Bristol and the surrounding districts and this is divided into four areas. As with Sub-Regions, each area will be in charge of a Controller responsible to the Sub-Regional Controller.

A large scale exercise was held in October, to provide an opportunity of practicing certain principles of the Bristol Sub-Regional scheme, but only two of the four areas were exercised. These were areas 1 and 3, covering North Bristol and part of South Gloucestershire, and South Bristol and part of Somerset. Civil Defence Depots were, for the purposes of the exercise, established at the Home Office School, Falfield, and Charterhouse Sanatorium. Bristol personnel manned the former depot and both the City Ambulance Service and the Civil Defence Ambulance Section participated, as well as other sections of the Corps, i.e. Rescue, Wardens, Welfare and Headquarters sections.

Civil Defence Instructors

Although the Civil Defence and Health Committees authorised six members of the Health Department and the same number of part-time volunteers, to attend Home Office training schools, only one vacancy was allotted to Bristol during the year. Mr. J. Mountjoy, of the Chief Public Health Inspector's Section, and part-time Station Officer in the Shirehampton area, was nominated to attend. This officer gained a

“Special” certificate and thus shares this distinction with the Deputy Chief Ambulance Officer, Mr. G. Joy, who obtained a similar award during the previous year.

At the end of December, the Department had three qualified Ambulance and Casualty Collecting Section Instructors.

First Aid Training

Fewer first aid classes were arranged than in previous years and the following table shows the numbers attending for training in this specialist subject. The numbers include volunteers from other sections, i.e. Rescue, Welfare and Wardens’.

	Full First Aid		Basic First Aid	
	Initial course—12 lectures and demonstrations followed by an examination	Refresher course—6 lectures and demonstrations	Initial course—6 lectures and demonstrations	Refresher course—4 lectures and demonstrations
No. of classes arranged . .	3		3	1
No. of volunteers examined	33			
Passed	33			
Failed				
No. of volunteers commencing refresher or basic courses			33	14
Attended 6 lectures . .			15	5
Attended 5 lectures . .			13	3
Attended 4 lectures . .			3	
Attended less than 4 lectures			2	6
Number completing course			28	8

Ambulance and Casualty Collecting Section

The enrolled strength of the Section at the end of the year was 649, but only about 200 of these can be considered effective. The remainder have not yet responded to repeated invitations to participate in training activities.

Weekly practices continued throughout the year and the accent was on practical work rather than theoretical. A number of map-reading sessions were arranged and these took the form of “treasure hunts”. Volunteers were given a series of map references which involved journeys outside the City of anything up to 30 to 40 miles, and asked to note various landmarks, i.e. churches, telephone kiosks, etc. Not many failed to find their targets and most volunteers thoroughly enjoyed this phase of training. Films and film strips also proved a popular medium of instruction.

Much of the training enables our volunteers to render assistance to others during peace time, and several have rendered first aid to members of the public involved in accidents.

On one occasion a pupil undergoing driving instruction assisted an injured motor-cyclist, and other volunteers treated spectators who had sustained injuries whilst watching the Civil Defence Tattoo on Durham Down.

Competitions

The third annual Ambulance Section competition was won by Bedminster Sub-Division for the second successive year. Clifton were once again the runners-up.

The test took a different form to previous years and was based on the changed functions of the section consequent upon the introduction of casualty collecting parties. Each team consisted of an ambulance crew and a casualty collecting party of seven persons. On former occasions only four persons constituted a team.

Parades

Civil Defence Ambulance Section volunteers were present at the Battle of Britain and Remembrance Day parades. They also assisted with cinema collections in aid of the Lord Mayor's Christmas Dinner and Hungarian Relief Funds. Many of our volunteers, undergoing driving lessons, and their tutors, willingly offered to collect clothing for Hungarian refugees and for this purpose called upon many householders in the City during their periods of instructions.

Civil Defence Training for Members of the City Ambulance Service

The Chief Ambulance Officer refers to the Civil Defence training given to members of the City Ambulance Service in Section B of this Annual Report.

Staff

Only one full-time clerk/typist is employed and the administrative and training arrangements have again been undertaken by the officers concerned, in addition to their normal duties. As under these conditions it was not possible to extend our activities and only with difficulty maintain an interesting and comprehensive training programme, the Civil Defence Committee in December authorised the appointment of a full-time Instructor on the Medical Officer of Health's staff. This officer will ultimately be responsible for much of the detail undertaken until now by Mr. R. Wood, the Chief Ambulance Officer, Mr. G. Joy, Deputy Chief Ambulance Officer and Mr. E. G. H. Spencer.

MEDICAL RECORDS IN THE PUBLIC HEALTH DEPARTMENT

Ethel H. L. Duncan
(*Medical Records Officer*)

Since April of this year I have been officially in charge of the Notification and Statistics sections, as well as continuing to administrate the Hollerith machine unit, to act as consultant, when requested, for any problem concerning record designing or record systems, and to assist as far as possible with special investigations or other statistical analysis. Miss Wyatt was appointed in October to the new post of Assistant Records Officer.

The notification and statistics sections handle every week the notifications of births and of infectious diseases, immunisation records for diphtheria, whooping cough, tetanus and poliomyelitis and for vaccination against smallpox, copies of the death certificates and all the various lists, cards, forms and statistical ledgers and graphs pertaining thereto which are necessary for the control of infection, for the care of the patient or the protection of others in appropriate cases, and for the statistics required by the administrative staff of the department, by the Health Committee, by the Registrar General, by the Medical Officer of Health for his annual report, and by the Ministry of Health.

The amount of clerical work which is involved is considerable as may be seen if we consider, for example, the notifications of infectious diseases which, in times of a measles epidemic, may amount to over a hundred a day. A list of new notifications and of admissions to Ham Green Hospital is compiled daily, and distributed to certain doctors within the department and to the Public Health Laboratory at Canynge Hall, confirmation of diagnosis etc., being obtained by telephone. For certain diseases a visiting card with essential details of the case is issued to the public health inspector or health visitor for that area, while certain doctors and the Public Health Laboratory must be advised immediately of others. The school health service is advised of all cases in school children, and the Medical Officers of Health of urban and rural district councils in adjoining areas are advised of the diagnosis of all admissions to Ham Green Hospital of patients coming from their district.

All notifications are entered on street index cards which can be very useful when tracing possible contacts and reservoirs of infection. There is a weekly return to the Registrar General of the numbers of the various notifiable cases, and a quarterly summary of confirmed cases differentiating the sex and age group. There is also a weekly return with some comparable figures for the previous week and the previous year which is distributed to the Medical Officer of Health and senior administrative doctors in the Department, and to the Medical Officers of Health of Gloucestershire, Somersetshire and the Kingswood area. A weekly analysis by age of notifications of measles and whooping cough with a cumulative total for the year is prepared for Dr. Walker, the Senior Medical Officer for Maternal and Child Welfare.

There is a weekly report to the local press of certain notifiable diseases along with the number of birth and death registrations, and also details by districts of the city to the Bristol Waterworks Company. Notifications of infectious diseases are included in the statistical report prepared for each meeting of the Health Committee of Bristol Council. A more

comprehensive report dealing with the previous year's statistics is presented to a January meeting of the Health Committee, and summary tables are published in the Annual Report of the Medical Officer of Health. Statistical tables and graphs are maintained in the Department and these provide readily available basic data for comparisons and trends and for special enquiries relating to Bristol.

At the request of a general practitioner, a clerk in the notification section arranges for the admission to Ham Green Hospital of infectious cases by ambulance, and also for any subsequent disinfection by the Disinfecting Station. General practitioners receive a nominal fee for the notifications of infectious diseases and accounts are, therefore, kept for an annual payment to them.

The punched card unit which is a joint project by Bristol Corporation and the University of Bristol continues to help with the analysis of data in many subjects. The analysis of school accidents in Bristol to be found elsewhere in this report was carried through on these machines. Among other subjects dealt with were adoptions, ear defects in school children, tuberculin reactions in University students, illnesses in children in a general practice, growth and puberty in schoolgirls, and the findings at medical inspections of schoolboys attending a grammar school. The information on the birth notifications and on the copies of the death registrations received in the Department is coded and transferred to punched cards which are extensively used to watch trends and to provide a basis for the whole City with which to compare special groups.

There has been a considerable number of requests for assistance with the statistical analysis of data by various investigators of medical or socio-medical subjects. These have included blood pressure readings in normal people, jaundice in premature infants, blood clotting times, coronary thrombosis, tuberculin testing etc.

Much of my time has been concerned with surveys and special investigations, mainly in assisting with the general planning, the selection of representative cases, the utilisation of data already being recorded within the Department, in designing any forms required for the recording of information, and in collating, analysing and interpreting the results. Occasionally I have assisted with the selection of cases or controls and with the local office administration of surveys when the Public Health Department is co-operating with outside bodies. In this latter category came an investigation for the Ministry of Health of the feeding of babies with regard to Vitamin D in supplements and foods, and a special enquiry into the history of children dying of leukaemia along with children of the same age from the same area for comparison which was being undertaken on a national scale by the Oxford Department of Social Medicine.

The new record card for District Nurses' cases came into use this year and is proving quite successful in its dual capacity of a case record and a basis for essential statistics. Its possibilities for more detailed statistics on the various illnesses or disabilities treated by the District Nurses and the frequency of different kinds of treatments will be explored more fully in 1957.

I have undertaken a review of some sections of the routine medical and statistical records within the Department with a view to eliminating outdated detail or other unnecessary procedures whenever possible and revising some of the documents to conform better with current usage. An improved record for home help cases was devised which will come

into use in the 1957 financial year, and which will act as an envelope for correspondence and administrative data and yet provide a case record with the latest details available on the outside for the rapid reference which is so necessary in this frequently changing service.

The introduction of the poliomyelitis vaccination scheme by the Ministry of Health early in 1956 with its preliminary registration of those eligible and wishing to take advantage of it, required special efforts in various sections of the Department. With regard to the records section there had to be the rapid preparation of a records scheme and the designing of the necessary record forms. We were fortunate in getting priority in the printing of the 60,000 cards required. As it was planned to give a registration card to each eligible child attending school, the card was designed so as to have a tear-off section giving the parent some information about the scheme in general as well as of registration procedures in Bristol. The registration cards were planned also to incorporate the details of the injections when these were done, thus obviating any additional printing and the labour of copying many thousands of names and addresses. All cards returning from the schools had to be scrutinised for those with the parents' signature and consent, and then, along with the cards returned by the clinics, they were sorted and counted according to the Ministry of Health requirements by year of birth, month of birth and sex. For our own administrative purposes we also had to count the numbers to be done at each of the eleven clinics where injection sessions were to take place.

Distribution of the registration cards through the schools involved much extra labour for all concerned but undoubtedly increased the number of registrations as more than half the eligible children at school were registered, but only about one seventh of the younger children.

Almost 20,000 children were registered in Bristol for vaccination against poliomyelitis, and less than a tenth of these were immunised in 1956. All injections were done by appointment and it was found that 25 per cent. of children failed to turn up for their first injection because of illness, domestic crises, etc. This entailed much additional work for the clinic staff and also for the clerks in the notifications section who were handling the appointment system and with it the hundreds of requests for a second appointment at a later or more convenient date.

There have been many demonstrations of the statistical machines to visitors to the Department, many of whom are seeing such statistical aids for the first time. There have been a number of visitors from abroad interested in discussing methods of collecting and recording statistics, and it is always interesting to hear of the different conditions in their own countries which affect the information to be recorded as well as the procedures by which reliable basic statistics are procured.

CONSTITUTION OF THE HEALTH COMMITTEE, 1956

Chairman:

Alderman J. J. MILTON

Vice-Chairman:

Mr. W. H. ENGLAND

Alderman:

Mrs. A. E. NUTT

Councillors:

A. B. ABRAMS
Mrs. M. E. CASTLE
Mrs. A. M. CHAMBERLAIN
W. W. CLOTHIER
B. J. M. DAVIES
J. D. FISK
G. P. C. FORD

S. T. GAMLIN
Mrs. E. KEIGHT
Dr. A. M. MACLACHLAN
W. J. MUNSLOW
H. F. G. SKEATES
Miss J. STEPHEN

PUBLIC HEALTH STAFF, 1956

Medical Officer of Health (City, Port and Schools): R. C. WOFINDEN,
M.D., B.S., D.P.H., D.P.A.

Deputy Medical Officer of Health: P. G. ROADS, M.D., B.S., D.P.H.
(13th August, 1956).

Principal Assistants

*Chief Assistant Medical Officer of Health and Senior Medical Officer for
Mental Health:* H. TEMPLE PHILLIPS, M.D., B.S., D.I.H., D.C.H., D.P.H.

Senior Medical Officer—Port: D. T. RICHARDS, M.R.C.S., L.R.C.P., D.P.H.

Senior Medical Officer—School Health Service: A. L. SMALLWOOD, M.D.,
CH.B., D.C.H., D.P.H.

Senior Medical Officer—Maternal and Child Welfare: SARAH C. B.
WALKER, M.D., B.S., D.P.H.

Senior Medical Officer—Tuberculosis: A. M. MCFARLAN, M.A., M.B., B.CH.

Senior Dental Officer: W. H. B. STRIDE, L.D.S.

Chief Public Health Inspector: F. J. REDSTONE, F.R.S.H., F.A.P.H.I.

Chief Administrative Officer: P. J. ROOM.

Chief Nursing Officer: Miss L. M. BENDALL.

Technical Officers

Health Education Officer: P. MACKINTOSH, B.A.

Medical Records Officer: Miss E. H. L. DUNCAN, M.A., B.SC.

Nutritionist: Miss M. CHAPMAN.

Consultant Bacteriologist

Professor K. E. COOPER, B.SC., PH.D., M.R.C.S., L.R.C.P., A.I.C.

Deputy Consulting Bacteriologist

H. R. CAYTON, M.B., CH.B.

Public Analyst

E. G. WHITTLE, B.SC., F.R.I.C.

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INTRODUCTION

I have much pleasure in presenting the Annual Report on the School Health Service for 1956, the 49th Report of the series, and the first since my appointment as Medical Officer of Health and Principal School Medical Officer for the City.

The general arrangements for the medical and dental care of the school children of Bristol have been continued on the same lines as in previous years.

The programme for the provision of clinics for the new housing estates on the outskirts of the city has continued to develop, and three new clinics were opened during the year; the Mary Hennessy Clinic at Hartcliffe, the John Milton Clinic at Henbury—which both serve new housing estates—and the Charlotte Keel Clinic, Claremont Street, Stapleton Road, which provides for one of the older districts of the city. Altogether, seven new clinics have now been built since the war to provide much-needed facilities both for school health and maternal and child welfare services, and there are now practically no areas of the city which have not clinic facilities within easy access.

Dr. Barbour, the Director of the Child Guidance Clinic, in his report on the Child Guidance Services (page 12) emphasises the importance of co-operation between the various departments in dealing with the problems of difficult children, and describes the various Case Conferences which are regularly held at the Child Guidance Clinic and elsewhere to discuss cases (page 13).

A report is given on the results of a foot survey which was carried out during the year in a girls' school, and an investigation on Athlete's Foot by Dr. Mary Gibson and Miss Mary English, mycologist. (pages 15 and 17).

In his report on the dental services (page 18) Mr. Stride, the Principal School Dental Officer, is able to report a substantial increase in the full-time staff of dental officers. Although one dentist resigned during the year, three new full-time officers were appointed and took up duty during the latter half of the year, and towards the end of the year two further full-time appointments were made of dental officers to take up duty early in January 1957. This will make a total of eleven full-time dental officers, the highest number for some years. It is gratifying to note this improvement in the dental staff position.

The work of hospital teaching has been expanded during the year, an additional full-time teacher being appointed to take up duty in April. It is now possible to provide hospital teaching facilities at Southmead Hospital and at the Bristol Royal Infirmary in addition to the Bristol Children's Hospital. (page 30).

Dr. Grace Woods gives an interesting report on the work of the cerebral palsy assessment clinic during the year (page 31).

A commencement was made with the vaccination of children against poliomyelitis during the year and a note on this is given on page 36.

On page 38 Dr. Smallwood gives an account of a revised arrangement of age groups for medical inspection in schools which it is proposed to adopt in future.

Two appendices are given at the end of the report, one by Miss Davies, the Headmistress of our Residential School for E.S.N. senior girls, who gives an entertaining account of some of the amusing and dramatic moments in life in a residential school for girls. The second is a detailed report by Dr. Rogan on a survey of ear defects which was carried out on school leavers from secondary modern schools during the twelve months ending July 1956.

The close co-operation which exists between the hospitals and the general practitioners of the city has continued throughout the year. This co-operation is of great assistance to us, particularly in dealing with handicapped children, and we are grateful for the help given in this way.

I should like to express my gratitude to Mr. Sylvester and his staff, especially the teachers and school welfare officers for their ready help and co-operation at all times.

ACCIDENTS IN SCHOOLS, 1956

C. E. Cooke

Accidents to school children have been analysed again this year by the punched card system. A survey of accidents for the years 1953-56 is also given as well as some figures showing fractures and squeezed fingers since, and including 1951.

In 1956 there were 569 accidents as compared with 510 in 1955; of these 284 occurred in Secondary Schools. It must be remembered, however, that the school population went up from 62,448 in 1955 to 63,521 in 1956. These figures include children in Nursery classes, but not in Special or Nursery Schools. Accidents to children under five years of age are not included in this survey, nor are accidents which happened off school premises, unless the occasion was a recognised school visit.

It will be seen in Table 1 that the figure for fractures in 1956 was 138, 55 of which occurred in playtime. Climbing frames were responsible for 6 of these fractures, four of which occurred in playtime. Figure 2 shows fractures related to age and sex in 1951-56. The high peak at the 14-year age group of boys was chiefly caused by games and P.T. Of the total number of accidents recorded in 1956, only 32 (5.6 per cent) were caused by climbing frames, and of these 8 were incidental, i.e. collisions.

In Table 1 accident occasions shown as "other" were chiefly those taking place in corridors, up or down steps, and in lavatories; of these last, common places for bumps, bruises and squeezed fingers, one was in one case caused by a rat, who feeling scared bit the finger of a small boy who was trying to make friends. One boy fell down a coal chute, one fell off a coal house and two sustained injury when attending a school party.

Injuries shown as "other" in Table 1 were mostly foreign bodies in the eye, though one boy "holding nails in his mouth, accidentally swallowed one—the teacher would have been unaware had the boy not had to ask for another nail. He himself was quite unperturbed."

It will be seen in Table 2 that over the years 1953-56 girls have had almost as many sprains and strains as boys. This may be due to the fact that boys, with their extra vigour, have more serious accidents than girls, and may also account for their having more than double the number of fractures. One hundred and twenty-three of these fractures occurred in playtime, when the girls were probably indulging in less vigorous exercise.

Table 3 shows occasion on which injury occurred by age and sex over the last 4 years. It will be seen that the numbers occurring in playtime are particularly high (595 boys and 240 girls). The high numbers under "other" are, as mentioned before, chiefly those taking place in corridors, on stairs, in cloakrooms and lavatories, and up to the age of 14 there is no considerable drop.

Figure 1 shows all cuts sustained by girls and boys as well as those of cuts to the head. These follow much the same pattern. It will be seen that at the ages of 7 and 11 the numbers are higher. Is this perhaps the result of a new environment in a different school?

Cuts to the head seem to be rather a large proportion of all accidents, as seen in Tables 1 and 2, and are probably avoidable to some extent when children are trained to respond instantly to unexpected stimuli, and have the experience of being able to transfer their weight quickly from one part of the body to another. Much of the modern training in movement gives children the opportunity to practise transference of weight at different

speeds and at different levels; where this is the custom, children are not only more supple, but more confident in what they attempt, knowing that they are able to adjust themselves quickly when necessary. This applies to all accidents not only to those to the head.

It is interesting to note that cuts figure more largely than bruises. This is probably due to the fact that bruises, being slight, are not recorded, whereas cuts being more bloody, are treated with greater respect.

From Figure 3 it will be seen that the number of accidents rises in February and March, sometimes due to icy playgrounds in February, and falls during April, part of which is accounted for by the school holidays which also account for the drop in December.

The number of squeezed fingers, as shown in Figure 4 though remarkably high, especially among girls in the six-year-old group, is by no means cancelled out at the later ages.

Many of these painful accidents could surely be avoided by some form of safety spring being fixed to doors to ensure a slow shutting. Boys' woodwork and metal work are responsible for 73 accidents over four years, as compared to 14 suffered by girls during domestic science. Again it seems as if this low figure among girls is due to training given them in avoiding accidents, and is a great credit to the teachers concerned.

This year a special examination has been made of the numbers of accidents occurring in the different types of Secondary Schools, and the result is as follows:

Grammar	9.3	accidents	per	1,000
Technical	26.7	"	"	"
Commercial	12.6	"	"	"
Bilateral	26.5	"	"	"
(Secondary Modern with Grammar)				
Secondary Modern	11.9	"	"	"

It is interesting to note that Dr. G. A. Lovell carrying out a small investigation into accidents occurring in two new Secondary Schools in Bolton finds that the accident rate in the Technical School was half that of the Secondary Modern School. This investigation was obviously carried out on a completely different basis from that in Bristol, as his accident rate is more than ten times that of Bristol.

Accident Prone Children

Children mentioned in 1955 as having had three accidents in previous years, sustained no further accident in 1956, nor do the names of those children who had two previous accidents occur again in 1956.

One girl had two accidents in 1956 and one in 1955, all fractures; as well as these she had one fracture at home. Her headmistress says that "her bones break easily". She has now left school and no accidents have been reported to her younger sister.

Twenty children had one accident in 1956 and one in a previous year; 8 had two, and 1, a boy, three accidents in 1956.

Again, it does not seem as though there were any accident prone children, but it does seem possible that there are accident prone schools. This is borne out by the numbers of accidents that occurred to the same children in the Secondary Schools with an exceptionally high accident rate.

For example in

School A A Secondary Modern Boys' School. One boy had three accidents and another two in 1956. Another had two accidents, one in 1955 and 1956.

School B A new Mixed School had no repetitions.

School C A Girls' School had one girl with two accidents.

School D A Mixed School had one boy with two accidents in 1956, and one girl with one accident in 1954 and one in 1956.

School A also had a high proportion of accidents in previous years.

TABLE I
BRISTOL SCHOOL ACCIDENT SURVEY, 1956

Type of Injury by occasion and sex																											
Type of Injury	BOYS													GIRLS													
	Playtime at school	Games in field	Games in playground	P.T.	Swimming Baths	Science Lesson	Domestic Science	Gardening	Classroom	Woodwork	Other	Games in Gym	TOTAL	Playtime at school	Games in field	Games in playground	P.T.	Swimming Baths	Science Lesson	Domestic Science	Gardening	Classroom	Woodwork	Other	Games in Gym	TOTAL	
Fracture, crack	37	19	1	19	-	-	-	-	2	1	9	-	88	18	2	3	13	-	-	-	-	2	-	-	10	2	50
Dislocation ..	2	2	-	4	-	-	-	-	-	-	2	-	10	1	-	1	2	-	-	-	-	-	-	-	-	-	4
Sprain, strain	8	7	2	3	-	-	-	-	2	-	3	1	26	4	-	2	4	-	-	-	-	-	-	-	4	-	14
Cut, puncture	57	16	-	11	5	2	-	2	18	15	43	-	169	25	3	2	5	-	1	1	1	9	-	17	-	64	
Splinter ..	-	-	-	-	-	1	-	-	2	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	1	
Burn, scald ..	-	-	-	-	-	-	-	-	-	-	-	-	8	1	-	-	-	-	-	-	-	1	-	-	-	1	
Squeezed fingers	2	-	-	1	-	-	-	-	3	-	2	-	-	-	-	-	-	-	-	-	-	1	-	-	-	9	
Bruise, abrasion, bump ..	25	12	1	11	1	1	-	-	1	1	5	-	58	11	2	4	3	1	-	-	-	4	-	-	4	1	29
Concussion ..	11	1	-	1	-	-	-	-	-	-	4	-	17	2	-	-	2	1	-	-	-	-	-	-	-	5	
Nose bleeding	2	-	-	2	-	-	-	-	-	-	1	-	4	-	-	-	1	-	-	-	-	-	-	-	-	2	
Other ..	4	-	-	-	-	-	-	-	-	2	1	-	7	-	-	-	1	-	-	1	-	-	-	-	-	-	
													390													179	

TABLE 2
BRISTOL SCHOOL ACCIDENT SURVEY, 1953-56

Type of Injury by occasion and sex																											
Type of Injury	BOYS												GIRLS														
	Playtime at school	Games in field	Games in playground	P.T.	Swimming Baths	Science Lesson	Domestic Science	Gardening	Classroom	Woodwork	Other	Games in Gym	TOTAL	Playtime at School	Games in field	Games in playground	P.T.	Swimming Baths	Science Lesson	Domestic Science	Gardening	Classroom	Woodwork	Other	Games in Gym	TOTAL	
Fracture, crack ..	123	55	3	58	1	-	-	-	7	2	30	-	279	54	9	9	41	1	-	1	-	-	5	-	24	2	146
Dislocation ..	13	9	1	11	1	-	-	-	1	1	4	-	41	4	1	2	4	-	-	1	-	-	-	-	1	-	13
Sprain, strain ..	24	17	5	23	-	-	-	-	2	-	10	1	82	19	7	7	23	-	-	-	-	-	-	-	17	-	73
Cut, puncture ..	271	43	7	32	11	5	9	66	57	114	-	-	615	81	8	7	15	1	1	2	3	30	-	60	-	208	
Splinter ..	1	-	-	2	-	1	-	2	-	1	-	-	7	-	-	-	-	-	2	2	-	1	-	-	-	4	
Burn, scald ..	1	-	-	-	1	4	1	-	-	3	2	-	12	1	-	-	1	-	3	6	-	-	-	-	-	10	
Squeezed fingers	8	-	-	1	-	2	-	11	1	11	-	-	34	9	-	-	1	-	-	1	-	8	-	18	-	37	
Bruise, abrasion, bump ..	106	34	14	37	3	1	1	9	5	37	-	-	247	53	9	10	25	4	2	-	-	15	-	26	1	145	
Concussion ..	28	6	-	6	1	-	-	-	1	1	7	-	49	11	1	2	3	1	-	-	-	1	-	5	-	24	
Nose bleeding ..	10	3	1	2	-	-	-	-	-	-	-	-	16	4	1	1	1	-	-	-	-	1	-	1	-	9	
Other ..	10	2	-	3	1	-	-	4	3	4	-	-	27	4	1	1	2	-	-	1	-	4	-	1	-	14	
	595	169	31	175	19	13	1	10	102	73	220	1	1409	240	37	39	116	7	6	14	3	65	-	153	3	683	

TABLE 3
BRISTOL SCHOOL ACCIDENT SURVEY, 1953-56

Occasion		Age		Occasion on which injury occurred by age and sex																							
BOYS														GIRLS													
4	5	6	7	8	9	10	11	12	13	14	15	16+	Total	4	5	6	7	8	9	10	11	12	13	14	15	16+	Total
1	55	67	85	72	72	55	56	46	31	38	13	4	595	-	23	36	33	35	17	25	24	23	14	8	2	-	240
..	1	1	2	1	8	12	19	28	28	42	14	13	169	-	1	-	-	-	-	3	3	6	6	11	6	1	37
..	-	-	2	-	4	7	3	3	1	9	1	1	31	-	-	2	2	2	6	5	4	6	9	9	-	2	39
..	-	12	11	15	11	9	10	15	35	22	30	3	2	175	-	5	10	7	11	10	13	17	19	13	3	1	116
..	-	-	-	-	-	1	3	3	4	2	3	2	19	-	-	-	-	-	-	1	1	2	1	1	1	1	7
..	-	-	-	-	-	-	4	2	2	3	-	2	13	-	-	-	-	-	-	-	1	1	2	2	2	1	6
..	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	1	1	6	4	2	1	14
..	-	-	-	-	1	1	-	-	4	2	1	-	-	10	-	-	-	1	1	-	1	1	1	1	-	-	3
..	-	18	20	8	12	12	5	7	9	5	1	-	-	102	1	10	11	9	5	4	5	4	2	3	-	-	65
..	-	-	-	-	-	-	-	3	17	23	5	-	-	73	-	-	-	-	-	-	-	-	-	-	-	-	-
..	-	19	18	25	19	21	19	17	13	31	28	9	1	220	-	13	23	8	10	12	16	16	15	25	6	1	153
..	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	1	1	1	-	-	-	3
..	1	105	117	137	116	128	111	127	157	152	185	50	23	1409	1	52	82	61	46	61	70	76	71	77	20	6	683

Figure 1

Bristol School Accidents Cuts related to Age and Sex 1953-56

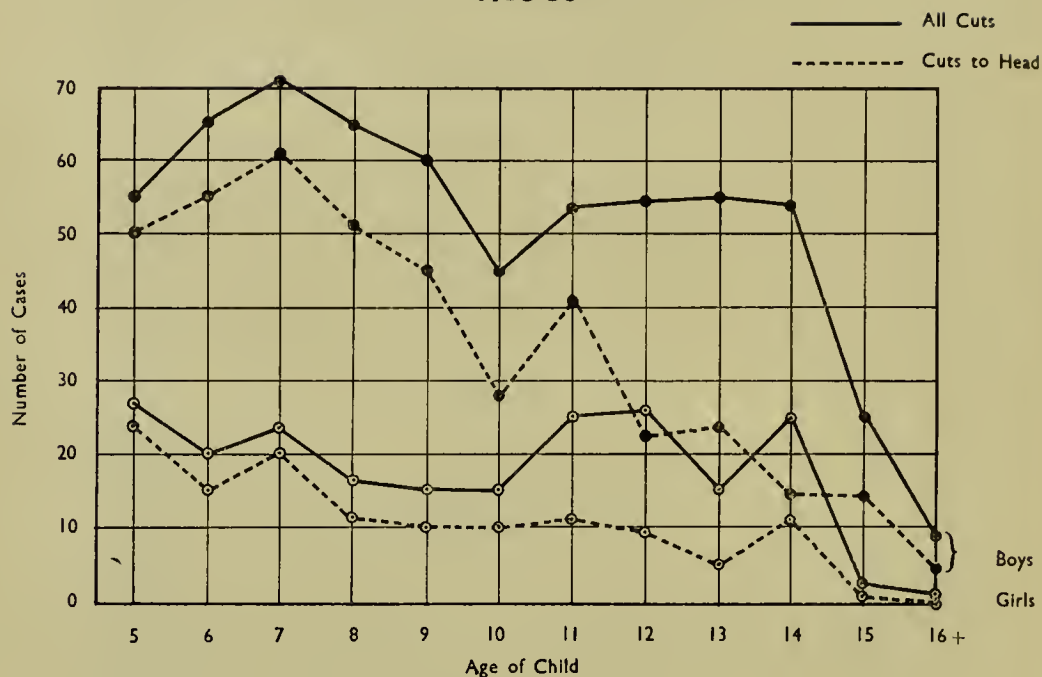


Figure 2

Fractures related to Age and Sex 1951-56

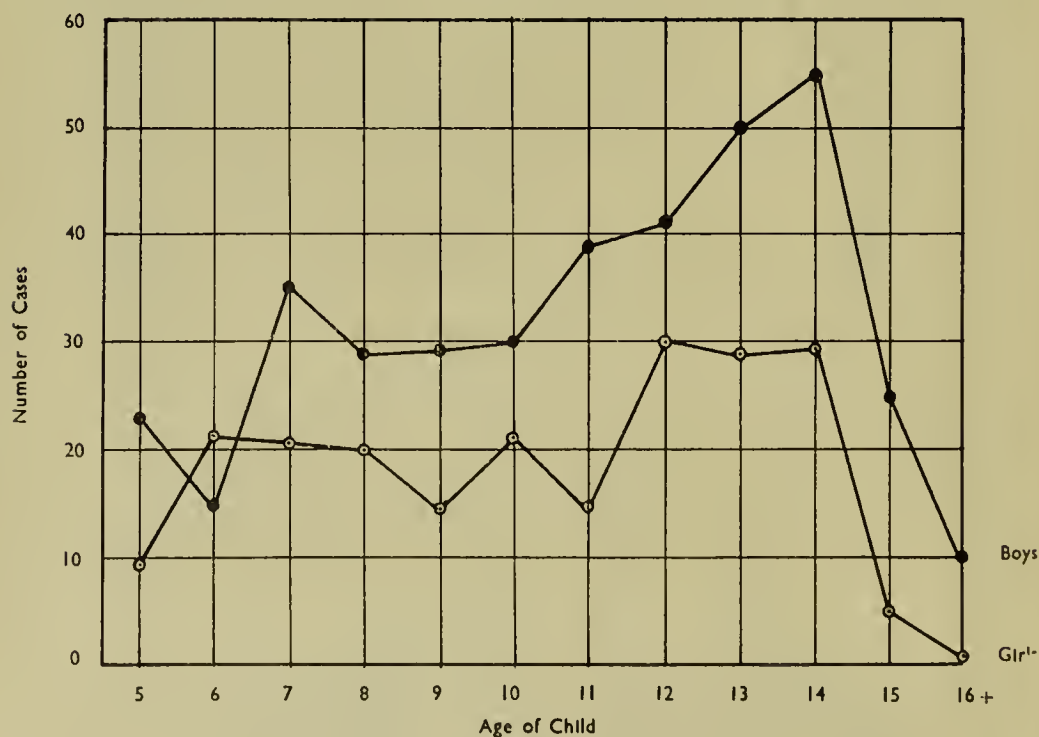


Figure 3

Bristol School Accidents

Accidents by month of occurrence

1951-56

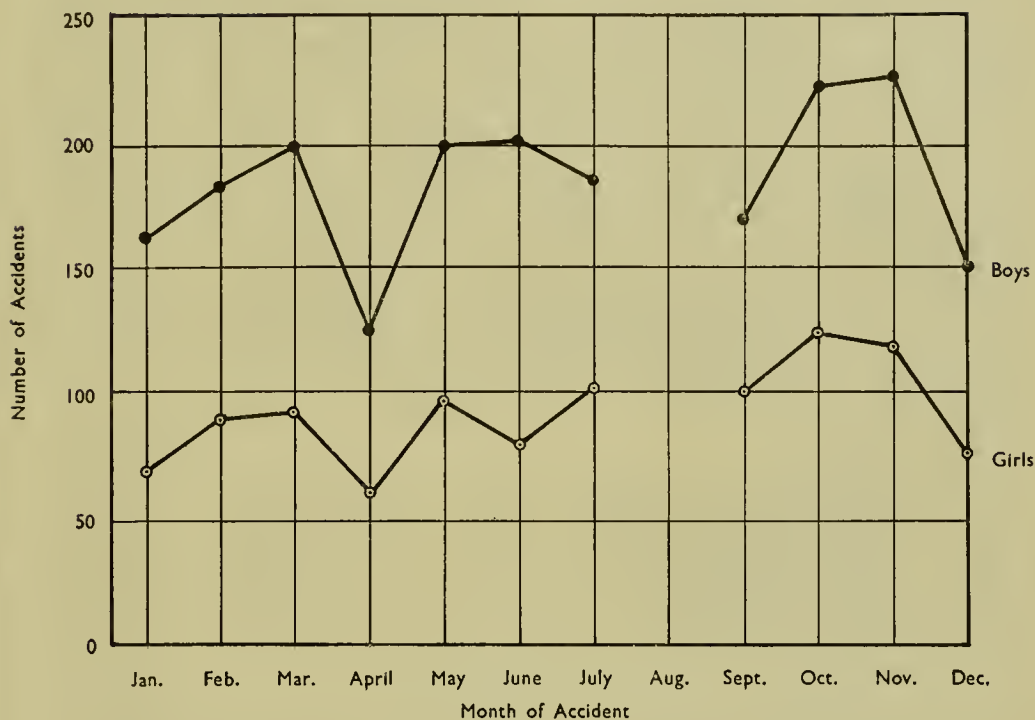
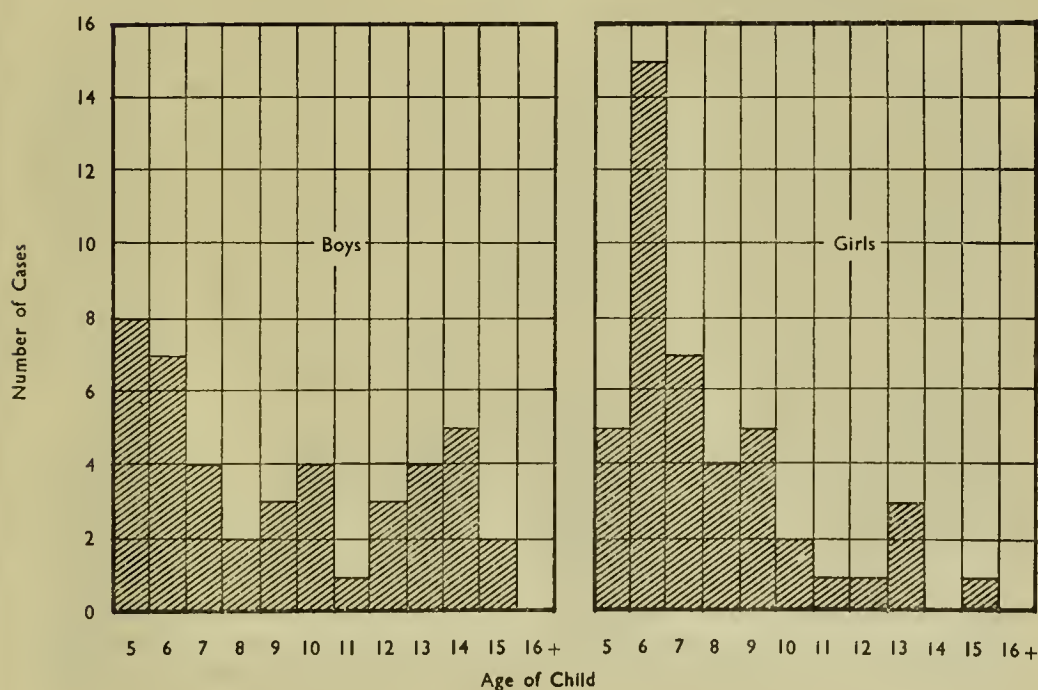


Figure 4

Squeezed Fingers

1951-56



CHILD GUIDANCE CLINIC

R. F. Barbour

Changes of Staff

Mr. C. J. Beedell, Senior Assistant Psychologist, left the Clinic on the 31st October, 1956, to take up a Research Fellowship at the Bristol University. He is kindly allowed by the University, however, to continue work at the Clinic for two sessions a week. His place will be filled by Dr. Kenneth Harrison, from the Child Guidance Clinic, Belfast, who, it is hoped, will be able to take up his appointment on the 1st February, 1957.

Dr. Helen Gibb, whole-time School Medical Officer seconded for part-time work at the Child Guidance Clinic, returned to full-time school medical duties at the end of November, 1956, and her place was taken by Dr. Kaye.

Dr. James Warner was appointed by the South-Western Regional Hospital Board on 1st October, 1956, as Registrar in Psychiatry, part-time to the Child Guidance Clinic.

Annual Statistics

	1955	1956
<i>Psychiatric:—</i>		
Diagnostic interviews	372	361
Physical examinations	352	343
Treatment interviews	1,352	1,314
Parent interviews	110	162
Others interviewed	14	13
<i>Psychological:—</i>		
Examinations, including Juvenile Court cases	639	665
Treatment interviews	1,171	1,239
Parent interviews	228	160
Others interviewed	27	19
Other visits	93	95
<i>Social:—</i>		
Interviews with parents	2,096	2,233
Interviews with others	10	13
Home visits	129	184
Other visits	21	4

Child Guidance in this country is going through a stage of serious self-criticism and re-assessment. In the "twenties" it was a new speciality, and its unique contribution was focussing attention on the emotional problems of children and pointing out how they could affect development, both at school and at home. Its characteristic method was to use a team of 3, a psychiatrist, a psychologist and a psychiatric social worker, each at that time having a very different background and training. Twenty-five years later we find the members of the team more nearly interchangeable; there are clinical psychologists, lay psychotherapists and analytically orientated psychiatric social workers who may have more experience of emotional problems than the psychiatrist.

Many of the "discoveries" are now generally accepted and are found equally in the curricula of teachers, health visitors, medical undergraduates, social science students and the like. As a result the school child is probably better looked after, as far as emotional problems are concerned, than either the pre-school infant, or the adolescent. Some feel, therefore, that attention should now be focussed on the toddler, as it is during the very early years of life that so many neurotic and behaviour traits are first seen. The adolescents are also less well provided for and a

later session, say from 5—8 p.m. would be welcomed, as they would not then have to face the difficulties of asking for time off work. Child guidance is concerned with growing people, for whom the arbitrary divisions of the administrators at certain ages can, in fact, create rather than solve difficulties, and for this reason there are some who would like to see child guidance more medically orientated, as the doctor, while recognising that differing influences are at work in the study, say, of paediatrics and geriatrics, is not influenced by the 5th and 15th birthdays.

Another boundary that is tending to disappear is that between the different forms of disability, for instance, between the naughty and the nervous child. Soiling can alternate with stealing, truanting with nightmares. Emotional conflict can give rise to a great variety of signs and symptoms, and there must therefore be close co-ordination between all those concerned with deprived and handicapped children.

In this Annual Report, I would like to stress the importance of co-operation between different departments, and in particular to mention some of the regular case conferences in which members of this Clinic staff participate.

There is first the weekly case conference of new Child Guidance Clinic cases, which probation officers, children's visitors and all those specially concerned with the welfare of children regularly attend. Then monthly, the Chief Inspector of Schools has a conference, attended by the Senior School Medical Officer, the Head of the Special Services Department, the Superintendent Welfare Officer, the Senior Educational Psychologist and the Director of the Child Guidance Clinic. Here plans for typical cases are worked out, for instance, children with double disabilities and those found "inexpedient" in schools. Quite often there are children who do not fit nicely into administrative pigeon-holes, and special arrangements have to be made for each case. Then there are problems created by the parents who remove their handicapped children from special schools, and at a conference such as this, broad principles can be worked out as well as attention given to the details of the individual child.

The Children's Department holds a monthly conference, where not only the Children's Officer and his immediate staff are present, but also the Wardens of the Observation Centre and of the Residential Homes. The medical officer and the psychologist who visit the Centre attend, as does the Director of the Child Guidance Clinic. It is the job of the psychological staff to provide the Children's Department with the profile of the child, so that they can find appropriate foster homes or residential placements. Should the child go to a home with other children? If so, of what age? Is it wise for a girl who has memories of "other mothers" than her present one, to be enlightened? Sometimes meeting the "true mother" lays the ghost of fantasy. It is hoped by these means to lessen the chances of later maladjustment.

The Cerebral Palsy Assessment Clinic meets weekly, and illustrates the value of the combined approach to children's difficulties. Here, a paediatrician, a school medical officer and an educational psychologist pool their findings to give advice on the treatment, education, handling and placement of spastic children. This Clinic keeps in touch with all such cases as long as it can be of assistance to them.

There is also a Hearing Assessment Clinic, where children are seen by the Head of the Deaf School, by an ear, nose and throat consultant and by an educational psychologist. This clinic was previously held at the

Bristol General Hospital but has now been transferred to the Child Guidance Clinic. Once again, the team can make a better assessment of the doubtful case than probably any one individual by himself.

Other examples could also be given, such as the Leavers' Conference for E.S.N. children, but enough has been said to indicate the steps that have to be taken if the child is not to be lost sight of in the midst of a series of specialists' and departmental reports.

Conferences such as those outlined above take time, but illustrate the contribution that can be made by members of a Clinic staff, a staff who because of their own day to day work in the schools and clinic, may find it easier to be as conscious of the child as of his own problem.

Some would have it that the day of "Child Guidance" is over and that there should be a Child Psychiatric Clinic medically orientated and concerned only with psychotherapy of difficult children. In parallel there could be school psychological services by which advice could be given to teachers and parents. This would seem a retrograde step and to be too like a return to the dualism of body and mind. It is not a question of either/or, but a question of how much of each.

It is my opinion that the time has not yet come when both the concept and name of Child Guidance can be wisely put on one side. The term implies the bringing together of all those who can best help an individual and working out an integrated plan to meet each child's special requirements. This is something that the community still needs.

CHILDREN'S CHEST CLINIC

D. J. Sheerboom

The Clinic has continued to function on the same general lines as in the previous year, being held every Wednesday with the joint help of the psychologist where it is felt necessary.

The number of new cases has continued to increase and the total attendances increased by 47 per cent. over those for 1955.

Once again the types of cases seen were not purely confined to asthma but included many children who were "chesty" following colds, who had had attacks of acute bronchitis, or whose chest symptoms came from infection and blockage of the upper respiratory tract, the latter being treated either symptomatically or by being referred to the Ear, Nose and Throat Department with good results. Several cases of pure hay fever have also been seen. These various types of cases account for what may at first appear to be a high discharge rate from an asthma clinic, since most of them clear up after simple advice and treatment.

The remainder consist mostly of cases of true asthma, though I am pleased to report that, except for two, they have all been seen before any alteration or fixation of the chest has taken place. The majority have been treated on more or less orthodox medical lines with satisfactory improvement. The most valuable and certainly the most satisfying treatment of most of the cases has been the time spent in trying to alter the parents' attitude towards both the child and the disease. The vast majority still tend to "smother" them and to take a gloomy and hopeless view, and an awful lot of school attendance is lost unnecessarily. Most of them are amazed to find that when the child leaves for school with quite severe wheezing he has forgotten all about it by lunchtime.

There have been no cases of *status asthmaticus* and cortisone has not been used.

There are, however, one or two points on the question of allergy which may be of interest. As is well known, many people dealing with asthma hold sharply divided views on the importance of this as an aetiological factor. Probably it is still generally felt that it may be a cause in some cases but not very often. In connection with this I quote the following case:—

A girl aged 7 when first seen had shown no symptoms of rhinitis or asthma up to the age of 5. She was then given an expensive American doll with a mass of almost human hair, and fairly soon after this her mother first noticed attacks of asthma and complained that the child was never free from a "cold." Once suspicious of the doll we experimented with it, and discovered that if the child held it for about ten minutes, she would develop a profuse watery nasal discharge; after one hour severe sneezing would also develop. If she went to bed with the doll then a severe attack of asthma would occur. Since removing the hair no further symptoms have occurred.

Also possibly from the allergic point of view it has been noticed that in approximately 26 per cent. of all cases the family possesses a budgerigar. Whether, in fact, this is of any significance is not yet known but other workers have also noticed this high incidence.

As in 1955, suitable cases were sent to the Residential Open Air School. Four children were sent during the year with very good results which have continued since their return to their own homes. Fewer cases were referred to the Child Guidance Clinic but the advice of the psychologist was quite frequently sought.

On the whole it was a satisfactory year and again it is hoped that cases will be referred as early as possible after symptoms commence.

Statistics for the year are as follows:—

Total attendance	..	..	..	213
Total No. of new cases	..	..	..	47
Total No. of patients	..	..	..	105
Sex: M. 76; F. 29	..	..	..	2.6: 1
Age range 10+	..	..	..	29
5-10	..	..	..	62
Under 5	..	..	..	14
<i>Treatment:—</i>				
Discharges	..	..	..	48
Recommended for Open Air School	..	..	..	4
Referred to Child Guidance Clinic	..	..	..	3
Medical treatment or referred to Ear, Nose & Throat Consultant	..	..	..	50

FOOT SURVEY

A. L. Smallwood

As a result of a request from the teaching staff that there seemed to be an unduly high incidence at one school of plantar warts and other foot troubles a health visitor conducted her own survey on the whole of the girls in the school, prior warning having been given. The results were as follows:—

Number of girls on roll	..	..	..	..	549
Total number with verrucae	..	..	..	..	18
" " " corns or incipient corns	..	..	..	..	29
" " " mild or pronounced Hallux Valgus	..	..	..	..	13
" " " Athlete's Foot	..	..	..	..	4
" " " deformed toes	..	..	..	..	5
" " " hammer toes	..	..	..	..	2
" " " flat feet	..	..	..	..	4
" " " callouses	..	..	..	..	6
" " " possibly wearing too small shoes	..	..	..	..	21
Total number with heel bursae	..	..	..	..	2

The commentary that is prompted by these findings is that foot disorders are probably one of the commonest minor ills that affect school children. It is, of course, extremely important that these foot disorders should be set right at as early an age as possible, in view of the immense amount of work that the foot is going to be asked to do in future years. Some of the disorders which were picked out by the health visitor as worthy of attention might well be of little handicap to the girls themselves and indeed they might not complain about them for a long time but they were, in the opinion of the particular health visitor, likely to lead in later life to handicapping conditions.

The problem of the cramped toes has always been present and will always be so while children and adults wear the fashionable narrow shoes with pointed toes. In some families it seems that curling toes are more frequent than in others. This may be due to some real characteristic or perhaps to the fashionable habits of the family. Standards for flat feet and Hallux Valgus, can of course, be criticised. It is quite possible that the four girls indicated as having flat feet may merely have the relaxed type of muscles and the feet may be highly efficient for all ordinary purposes. In the case of Hallux Valgus it is known that many children have this state from their earliest years and that disability only arises after school life. Most surgeons would not interfere surgically unless there was actual disability. In the case of corns and callouses it would seem that these are very largely accepted by the owners as things of little consequence although they are probably the most amenable of the minor foot disorders to deal with.

In the case of Athlete's Foot one is surprised that only 4 of the girls were detected as suffering from this complaint. It may be that it is less apparent in the winter (this investigation took place in November) than in the summer months, and it may be that boys suffer from this condition more than girls but many dermatologists until recently have believed that most people harbour the causative organism.

As for plantar warts, of the 18 girls noted as suffering from this condition only a very small proportion were previously known to have them. This was a most disturbing finding and it is a little difficult to know what to do. One is frankly reluctant to go searching for plantar warts in all Secondary Schools because of the large amount of work that would be involved in dealing with the problem, if in fact this number represents the average number of the adolescent population who are infected by this condition. It is noteworthy that practically none of these girls had complained of their plantar warts. It is believed that there are roughly two schools of thought in this matter; that the plantar warts may be caused by the same organism that causes warts in other parts of the body and merely alters its characteristics because of the site of infection or the causative organism may be a specific virus. It is easy to incriminate swimming baths in the spread of this disorder but there is little concrete evidence to support this; on the other hand there is no real evidence how the organism is spread except that one knows that it is fairly widespread. Why the plantar warts seem to affect only or mostly adolescents is at present unknown. The same, of course, might well be said of acne and the susceptibility of the skin at this period of life is still not fully understood.

CHIROPODY CLINIC

L. I. W. Tasker

The increased numbers of children attending for foot treatment noted during 1955 continued during 1956, the total rising from 4,868 to 6,038. This was again due to the numbers of Verrucae of which there were 970 new cases.

Other categories remained fairly constant except for miscellaneous, which includes ingrowing nails, corns and callosities. This number rose from some 190 new cases to 260.

During the year approximately 30 cases were referred to the Orthopaedic Department for operation or physiotherapy.

Attendances for Treatment, 1956

Defect	Primary, Secondary and Grammar Schools		Nursery Schools		Maternal and Child Welfare	
	1st	Other	1st	Other	1st	Other
Metatarsalgia ..	4	14	—	—	—	—
Foot strain and Bursitis ..	20	47	—	—	—	—
Hammer toes ..	11	51	—	—	—	—
Hallux valgus and rigidus ..	16	56	—	—	—	—
Verrucae pedis ..	970	4,108	—	—	—	—
Pes Cavus	4	11	—	—	—	—
Other conditions ..	250	464	3	3	5	1
TOTAL ..	1,275	4,751	3	3	5	1

Investigation of "Athlete's Foot"Mary D. Gibson
Mary P. English

Early last summer the usual seasonal swarm of children, suffering from that skin disease complex known by the generic name of "Athlete's Foot," began to descend on the clinics.

About the same time, one of us (M.P.E.) began to look around for fresh territory to explore in the realm of medical mycology.

It was decided not to confine the exploration to children reporting at the clinics for treatment but to go out into the schools. This meant that we would be able to see the children with such minor degrees of scaling or fissuring that they were either unaware of it or able to disregard it, as well as those with grosser lesions.

In order to get uniform results, one of us (M.D.G.) screened all the children and graded each child with lesions according to the clinical severity of the skin condition, while the other (M.P.E.) took most of the scrapings. We had the assistance of a clinic assistant who took the name, etc., of all the children picked out in this way. With this arrangement we found that we could comfortably examine about 320 children in a morning session.

The heads of the schools visited were very anxious to help in this investigation of a trouble which causes the loss of a great deal of school time, and our progress is in no small part due to their help in organising and marshalling the children.

Approximately 1,000 children (boys and girls) aged 11—15 have been examined in each of three areas of the City. The three areas were selected because the school medical officers working there had the impression that the infection rate was fairly heavy. Another factor influencing choice of district and school was that each group attended one of three different swimming baths.

Some very interesting results have been obtained so far, but up to the end of 1956 we had not completed the programme set out above so that final conclusions cannot yet be reached.

DEATHS OF SCHOOL CHILDREN

A.L.S.

This year shows rather an increase in the number of deaths of school children compared with former years. There were 25 in 1956 against 16 in 1955 and 22 in 1954. Although the numbers are small the sexes differ quite markedly, 18 boys and 7 girls. This is not entirely accounted for by the fact that 4 boys died following accidents as compared with no girls. One boy died from leukaemia and was the only death among the boys attributable to a new growth whereas 4 of the 7 girls died from causes of this nature. Five boys and 2 girls died from heart disorders, which in the cases of 2 boys and 2 girls were subsequent to rheumatic disease. One boy died from tuberculous meningitis. The table below shows the causes of death amongst school children during the year:

<i>Cause</i>	<i>Boys</i>	<i>Girls</i>
Acute leukaemia	1	1
Subarachnoid haemorrhage	1	—
Cerebellar haemorrhage	1	—
Rheumatic carditis	1	—
Acute rheumatic fever	—	1
Pneumonia	2	—
Myocarditis	1	1
Congenital malformation of aorta	1	—
Aortic stenosis	1	—
Infective hepatitis	1	—
Lead poisoning	1	—
Congenital malformation of heart	1	—
Bronchiectasis	1	—
T.B. meningitis	1	—
Intercranial neoplasm	—	1
Wilm's Tumour left kidney	—	1
Muscular dystrophy	—	1
Aplastic anaemia	—	1
Road accidents	2	—
Other accidents	2	—

DENTAL CLINICS

W. H. B. Stride

The dental staff remained at seven full-time dental officers until the end of June when Mr. D. J. Rees resigned. During the latter part of the year, however, three full-time dental officers were appointed: Mr. Sellin commenced duty at the new clinic at Claremont Street on 2nd July; Mr. Everard at Speedwell on 17th September; Miss Shinkwin at Brooklea on 12th November. It will be seen therefore that our efforts to gain recruitment to the staff have shown some results, and it is hoped to maintain this progress and if possible staff new clinics as they are built. Two further full-time dental officers have been appointed and will take up duty in January, 1957.

The number of sessions given by private practitioners during the year was 1,817, and this number will be correspondingly reduced as full-time officers are appointed.

At the end of the year the staff was equivalent to $10\frac{1}{2}$ full-time dental officers, including the Principal Dental Officer.

Although three full-time dental officers were appointed during the year we still have a long way to go before we can hope to undertake the treatment of the whole school population of 66,000, but the prospect is much brighter. Fortunately a certain number of the children are taken to their own dentists and are receiving regular attention privately. The fact that children can receive free dental treatment under the Health Act as well as from the Local Authority does mean that no child need be without dental attention.

Many children are still brought to the dentist only for relief of pain, but it is being increasingly realised by parents that it is far better to bring their children up for early and preventive treatment than for them to have to endure the ills of toothache or the severe discomfort of an acute abscess.

The facilities provided at the clinic for X-rays are of great help in the diagnosis of many of the conditions that come up for treatment—orthodontic diagnosis, difficult extractions, buried roots, etc., and the large number of front teeth that are fractured as a result of accidents.

X-rays were taken for 330 children during the year.

The number of children inspected in school was 39,624 (38,154 in 1955), and the number treated 18,393 (18,320). The number of permanent fillings was 16,606 (14,051) and in addition 585 nursery school children were inspected.

Evening sessions are now arranged at five clinics, and are well attended. They are especially appreciated by Grammar and Secondary School children, or where a mother has no one she can leave a small child with during the day. The opening of clinics in the new housing areas is enabling the work to be more evenly spread out over the City and making it easier for mothers to attend with young families.

The arrangements commenced in October, 1947, whereby a number of Bristol schoolchildren are inspected and treated by the Department of Children's Dentistry at the Bristol Dental Hospital was continued. The figures relating to the children dealt with at the hospital in 1956 are as follows:

Number of cases inspected	..	..	..	..	846
Number needing treatment	..	..	..	..	712
Number of new cases treated	..	..	..	..	145
Number of others treated	..	..	..	..	873
Total attendances	..	..	..	..	1,018

Oral Hygienist

The work of the Oral Hygienist has continued during the year, and 2,344 scalings and polishings have been carried out for children. Talks are regularly given to mothers and are very much appreciated. Occasional talks are given in school and these are likely to be increasingly asked for. The importance of this treatment and instruction in oral hygiene cannot be over-estimated in view of the very marked deterioration in the condition of the children's teeth since the end of rationing and the consequent relaxation of diet restrictions.

It is important to bring all the pressure we can to get children to take an interest in brushing their teeth and endeavour to form a regular habit, rather than a cause of vexation to both parents and children.

Dental Technician

The workroom at the new clinic at Claremont Street became available at the beginning of March, and since that time the dental technician has been working there instead of at Lawrence Weston Clinic.

During the year 310 dentures were constructed, 105 for school children and 205 for mothers; in addition there were 28 repairs. The need for dentures for school children was due usually to loss of a tooth or teeth owing to an accident or in a few cases to gross caries.

A start has been made in the construction of inlays, and 9 were made during the year.

Orthodontic Clinic

The arrangements for children requiring orthodontic advice and treatment have continued during the year. Children are seen by Mr. Nicol the Orthodontic Surgeon from the Dental Hospital who attends at the Central Clinic on one session each week for this purpose. Cases that will respond to simple treatment or require a period of observation are dealt with at the clinic, while those requiring appliance therapy are referred to the Dental Hospital for treatment.

Mr. Nicol reports that a waiting list of an estimated 6 months has built up this year owing to the staff position at the Dental Hospital. Cases which require urgent treatment, however, are still undertaken almost immediately.

The length of waiting time for non-urgent cases is to a certain extent governed by the number of urgent cases that are found to be needing immediate treatment.

Details of the work of the diagnostic orthodontic clinic during the year are as follows:

Number of new patients	..	..	..	..	603
Number of attendances	..	..	..	..	852
Number referred to Dental Hospital	..	..	..	..	388
Number terminated treatment	..	..	..	..	48

EAR, NOSE AND THROAT SERVICE

AURAL CLINICS

H. D. Fairman

We were very sorry to lose the services of Mr. Scarff who retired in September, after many years of service, and his experienced opinions are greatly missed. Mr. James Freeman has been appointed to take his place. The year has not been marked by any major epidemic necessitating the curtailment of the work of the Ear, Nose and Throat services.

During the past year the number of children suffering from aural defects attending the Clinic was 330 (including 11 pre-school cases and 22 nursery cases).

Out of a total of 109 new cases of middle ear suppuration found at school medical inspection, 96 failed to clear up with a few weeks' routine treatment at the minor ailment clinic, and were therefore referred to the aural clinic. Only 26 of these cases were outstanding at the end of the year (19 attending for treatment, 2 absentees and 5 having left school).

EMPLOYMENT OF CHILDREN

L. A. Tavener

During the year ended 31st December, 1956, appointments for medical examinations were made for 824 children. Of this number 19 did not attend and 2 were found unfit, and in these cases registration was refused. The remaining 803 were found fit and registration was completed.

The number registered rose sharply to a peak figure of 814 in 1954, 804 in 1955 and 803 in 1956, but the average number employed at one time in any month was 467 in 1954, 432 in 1955 and 474 in 1956, so it will be seen that the turnover has not been as great during 1956, and registered children have remained employed for longer periods.

One child was examined and found fit to take part in a professional entertainment. This figure is much lower than the previous year, but in 1956 Bristol children did not take part in the 1956/57 Pantomime, whereas 12 took part during the previous year.

The following table shows the types of employment in which children registered during the year were engaged:

<i>Trades</i>						<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Newsagents	..	..	..	..	..	652	54	706
Butchers	..	..	..	..	..	10	—	10
Grocers	..	..	..	..	..	16	4	20
Greengrocers	..	..	..	..	..	3	—	3
Dairies	..	..	..	..	..	2	—	2
Multiple stores	..	..	..	..	..	—	51	51
Others	..	..	..	..	..	3	8	11
TOTAL						686	117	803

ENURESIS CLINICJ. E. Kaye
S. W. Terry

During the year the number of sessions was reduced to four each week, but this has not affected the waiting list adversely; 309 children, including 5 nursery children, were seen at the clinic and 1,432 attendances were made, including 13 by nursery children.

The number of children who fail to keep successive appointments, especially for follow-up, is disappointingly high (86 in 1956). Sometimes it is possible to meet the parents elsewhere, at one of the other clinic centres or in the schools, and one gains the impression that the main reason for defaulting is parental disappointment and frustration on learning that no certain quick-acting remedy is available.

On the credit side, however, it is possible in most cases to help both parent and child especially when good relationship and co-operation are established and in 86 cases the children were sufficiently improved to be discharged. In addition, 27 children were referred either directly to the Child Guidance Clinic or to Miss M. Astley, the Psychiatric Social Worker.

At the end of the year, 144 children remained under active therapy or observation.

EYE CLINICS

R. R. Garden

The number of completed refractions showed a substantial increase in 1956. The total of 6,230 comprised 6,197 from primary, secondary and special schools, and 33 from nursery schools. Of 2,496 pairs of spectacles prescribed, 2,119 had been obtained by the end of the year. In 1,677 instances, glasses were not considered to be necessary.

Included in the 561 ophthalmic sessions which took place at the clinics is a number at which children requiring special investigation consultations were seen, e.g. those recommended for squint operation or hospital investigation for other eye conditions, and those requiring special education because of blindness or partial sight. In the course of the year, 127 operations for squint were performed on Bristol school children at the Eye Hospital. Dr. Stewart, who carried out most of the refraction work at the Authority's clinics is a Senior Clinical Assistant at the Eye Hospital, and is able to keep in touch with and take part in the treatment of school children referred there.

The Orthoptic Department at the Central Health Clinic was opened in May, 1956, and with Miss M. J. Smith in charge is proving a diagnostic and treatment centre of increasing value. Miss Smith reports as follows on the work of the Clinic during this preliminary period May—December, 1956:

Number of cases seen	..	..	..	..	..	1,192
Number given treatment	..	..	..	..	..	328
Number who attended for tests, occlusions and observation						864

In the last group, 36 were children under school age. Some work was also done, occupying 5 sessions, in the investigation of children with squints from Claremont School for Spastics.

Of the 33 young children from nursery schools who are noted above as having been referred for refraction from nursery schools, 10 required spectacles, i.e. about a third of those who attended, or about the same proportion as in the previous year. Although all concerned, doctors, nurses and teachers, are vigilant in the matter of detecting visual defects at an early stage, it is inevitable that a number do not come to light until the children are older. Systematic screening of large numbers by retinoscopy is not feasible for lack of personnel, but it would be interesting and probably valuable to carry out, in schools attended by young children, an experiment in detecting visual errors with the rotating E. test-type, under the supervision of an experienced observer. The Orthoptist would be a very suitable person to put in charge of such an investigation, and it is hoped that, without encroaching on the work of her clinic, we may be able to arrange for something of this kind to take place during the coming year.

HANDICAPPED CHILDREN AND SPECIAL SCHOOLS

Blind Children

A. L. S.

There has been a small increase in the number of children placed by the Authority at the Royal School of Industry for the Blind, Bristol, there being 20 children present at the end of the year as compared with 16 at the end of 1955. Two of the 4 additional children were cases of retrolental fibroplasia, of which it was noted in my report last year that there were about 6 cases in the city who were blind. There has been a slight change in the proportion of children who are boarders compared with those attending as day pupils but the numbers are, of course, very small. The

number of children placed at the Royal School of Industry for the Blind and other schools at the end of the year was as follows:

	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Royal School of Industry for the Blind, Westbury, Bristol:			
Residential Pupils	10	7	17
Day Pupils	2	1	3
Royal Normal College for the Blind, Shrewsbury	—	1	1
Sunshine Home, East Grinstead	1	—	1

Partially Sighted Children

There has been a slight increase in the number of children who need special education as partially sighted children and this has created something of a problem at the unit for these children at South Bristol Open Air School. This unit for 15 children contains children of all ages and the tendency is for them to be suffering from additional handicaps, very often a combination of partial sight and educational sub-normality. With the present accommodation severely taxed it is likely that a second class will be started in the near future to provide better grouping according to the ages and abilities of the children. At the end of the year the number of partially sighted children at South Bristol Open Air School and other schools was as follows:

	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
South Bristol Open Air School	12	4	16
West of England School for Partially Sighted Children, Exeter	2	1	3
Chorleywood College for Girls, Hertfordshire	—	2	2
Exhall Grange School, Coventry	1	—	1

At the end of the year there were 4 children on the waiting list for admission to the day unit at South Bristol Open Air School.

Deaf Children

During the year progress continued on the extensions to the accommodation at the Authority's Elmfield School for Deaf Children, though at a rather slow pace. At the end of the year there were 55 children (27 boys, 28 girls) in attendance at the school including 5 children (3 boys, 2 girls) in attendance at the school from other authorities; two of the three boys are classified as severely partially deaf. No children were waiting to be admitted at the end of the year and it is thought that the present accommodation is sufficient for the needs of the City and to allow a small number of vacancies for children from the county areas immediately adjacent to the City. A new group hearing aid was installed towards the end of the year and the fitting of the room for the Amplivox Individual Auditory Training Unit is expected to be completed early in 1957. In addition to the children at Elmfield School for the Deaf the following children were being maintained at various residential schools at the end of the year:

	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Mary Hare Grammar School, Newbury	2	1	3
Mill Hall Independent School, Cuckfield, Sussex	—	1	1
Royal School for the Deaf, Birmingham	2	1	3
St. John's Institute, Boston Spa, Yorks	1	—	1
Burwood Park School for the Deaf, Surrey	1	—	1
Royal West of England School for the Deaf, Exeter	—	1	1

In addition, two deaf/E.S.N. children were being maintained in Residential Schools at the end of the year, as follows:

	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Rayners School for the Deaf, Penn, Bucks.	—	1	1
Bridge House School, Harewood, Yorks	1	—	1

Partially Deaf Children

During the year a review was made of the present arrangements for dealing with partially deaf children in Bristol. There are approximately 33 children being dealt with in their own schools by the peripatetic teacher of the deaf, 15 in primary and infants schools, 17 in secondary and grammar schools and 1 in a special school. It was becoming increasingly apparent that this help was insufficient for the needs of the children and that frequently they did not like being singled out and withdrawn from their classes. Some grouping together of the children was therefore thought desirable.

In addition to the partially deaf children being visited by the peripatetic teacher in their own schools there were 5 severely partially deaf children on the roll of Elmfield School for the Deaf. There was a great variety in the age, ability and handicap of these partially deaf children. In general such children tend to be more handicapped when they are younger and less handicapped when they are older. This argues the need for early assessment and specialist help at an early age. An assessment made of 36 children showed that of these, 16 were reported to be in category 2A and 19 in category 2B, with one unclassified.

While the problem of ascertainment is in the hands of the Ear, Nose and Throat Consultant, the educational aspects are dealt with in the school and it seems that there is a fair amount of conflicting evidence between the medical and educational experience as to the exact degree of educability and the needs of the child. With these facts in mind a meeting of officers was held but was unable to come to any definite recommendations, so that the attendance of Mr. Lumsden, H.M.I., with his wide experience, was requested. On Monday, 22nd October, a meeting was held with officers of the Authority and other interested persons. Mr. Lumsden stressed that it was not only a matter of the child's hearing which needs to be considered but there is also the ability of the child to accept his deafness and the problem as to what extent the child segregates himself. The conclusion reached was that there was a need to set up a special class or unit for 8—10 of the more serious cases of partially deaf children of primary school age who were failing to make satisfactory progress. The children of secondary school age, it was thought, could remain in their ordinary schools, with special help where necessary from the peripatetic teacher of the deaf. There was still a need for some children to go to residential special schools and it was thought that there were sufficient places in residential special schools for the partially deaf belonging to other Authorities to cater for such children. It was agreed that as an experiment a special class should be set up attached to an ordinary primary school in a central position, with a suitably sympathetic Head and a specially qualified teacher of the deaf, in a classroom accoustically treated. For a number of their activities the children would be able to join with the other children of the school and it might be possible for them to receive more and more help in a hearing situation as time went on. The proposal to set up this special unit will, it is hoped, to be put into effect in the autumn term of 1957.

At the end of the year, in addition to the partially deaf children at Elmfield, the following partially deaf children were being maintained at residential schools:

	Boys	Girls	Total
Tewin Water Residential School for Partially Deaf Children, Herefordshire	2	—	2
Ovingdean Hall Residential School, Brighton ..	3	1	4

Partially Deaf Children Visited by the Peripatetic Teacher

R. H. Sturman

At the commencement of the year 1956 there were 31 children on the list to be visited by the peripatetic teacher of the deaf. Three girls and one boy from the 1955 list reached school leaving age and started work, and one girl needed no further help.

During the year four boys and five girls were added to the number, one boy left the district, one was sent to a residential technical school, and one boy and one girl were Grade I cases and not in need of special help at present.

The thirty-one children were dispersed throughout the City in twenty-eight schools and although 700 visits were made only the most needy could receive a regular weekly visit. Some were visited fortnightly and a few had no visits from September.

In January the dispersal was as follows:

Six boys and six girls in secondary schools; one girl in a grammar school; one girl in a special school; three girls and thirteen boys in junior schools and one girl in an infants school. Of the nine names added during the year three boys and three girls were in junior departments and one boy and two girls in infants schools.

One girl reached school leaving age in July and left school at the end of the summer term to begin work in September, another needed no further help, and a third left school at the end of the year.

In September five boys and two girls went from junior to secondary schools, and two from infant to junior schools.

At the close of the year there were:

				Boys	Girls
In Grammar schools	..	..	..	—	1
In Secondary schools	..	..	..	10	6
In Primary schools	..	..	..	10	3
In Infants schools	..	..	..	—	2
In Special schools	..	..	..	—	1
				—	—
				20	13
				—	—

Hearing Assessment Clinic

M. Sharwood

Early in the year it was decided that the accommodation provided in the out-patient department of the Bristol General Hospital was not conducive to obtaining the full confidence and co-operation of the children, in the assessment tests.

The problem of alternative accommodation was discussed at a meeting of the E.N.T. Surgeons and Principal School Medical Officer and his staff held on 14th May, 1956. It was agreed that an investigation be made as to whether suitable alternative accommodation could be made available in the out-patient department or the Physiotherapy Department of the Children's Hospital. The accommodation offered was, however, considered unsuitable and it was finally decided to make arrangements for the clinic to be held at the Child Guidance Clinic.

The last clinic held at the General Hospital was on 27th February, and the first at the Child Guidance Clinic on 23rd July.

Summary of Cases referred to the Clinic during the year

Number of cases	..	..	8 (6 boys, 2 girls)
Bristol cases	..	..	7
Others (Somerset)	..	..	1
Age range	..	..	2-2/12—5-4/12 years

Cases were referred by:

1. E.N.T. surgeon.
2. Child Guidance Clinic.
3. Private doctors.

Types of Cases referred and recommendations made.

1. Speech defective—No. of cases: 1. Apparently not deaf, case referred back to psychologist for further treatment.
2. Severe deafness—No. of cases: 4. Recommendation: Nursery Class for Deaf, Bristol. All cases subsequently admitted.
3. Severe deafness—No. of cases: 1 (Somerset). Recommendation: Nursery Class School for Deaf, Exeter.
4. Partially deaf case—No. of cases: 1. With deaf parents, one deaf and one partially deaf sisters. Recommendation: trial period in normal nursery. Case is to be closely supervised by speech expert.
5. Retarded case, borderline case E.S.N., age 2-8/12 years—extremely difficult to assess. Retest in six months time.

Educationally sub-normal children

A. L. S.

The only event of major importance concerning the schools for educationally sub-normal children during the year was the long awaited move of the junior mixed school from Newfoundland Road to Henbury Manor which took place in February, 1956.

Henbury Manor is situated in beautiful surroundings on the outskirts of the City and prior to being taken over for use as a special school was used as a primary school to serve a developing housing estate in the area. Like many other old properties, however, it has disadvantages inherent in buildings constructed as private dwellings. The smaller rooms are better suited for the smaller classes for educationally sub-normal children but with so many of the children having additional physical handicaps the presence of stairs sometimes presents difficulty, and the diminished amount of light compared with that available in a modern school building is also something of a drawback. However, steps are being taken to improve the lighting in some of the rooms and the principal need now is to provide a large room where the children can assemble, have their mid-day meal and take physical education. It is hoped to commence the construction of this room in the near future. With the transfer of the school to Henbury Manor it has been found possible to increase the accommodation slightly.

The school for educationally sub-normal girls is very excellently housed at the House in the Garden and the girls obviously benefit very much from the favourable school environment.

With two of the three schools now well provided for in the material sense the school for the senior boys is now the only one causing concern because of the inadequacy of the present site and buildings. It is earnestly hoped that this school can be provided with a new site preferably with new buildings so that the boys, in addition to the girls and the junior children, may enjoy the amenities and stimulus of good surroundings.

The numbers on the registers at the three day schools for educationally sub-normal children at the end of the year were as follows:

	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Russell Town (Senior Boys)	144	—	144
(including 1 from another Authority)			
House-in-the-Garden (Senior Girls)	—	91	91
(including 5 from other Authorities)			
Henbury Manor (Junior Mixed)	52	46	98

Ineducable Children

During the year 67 children were referred to the Local Health Authority for the purposes of the mental deficiency acts, 42 under Section 57(3), 1 under Section 57(3) and (4) and 24 under Section 57(5) of the Education Act, 1944. In addition, 43 educationally sub-normal children who left school during the year were referred to the Special Schools After Care Officer for supervision after leaving school. Of these, 31 had been attending Special Schools and 12 had been receiving special educational treatment in ordinary schools. In addition 5 children in the care of the Children's Officer were referred for supervision by the Children's Department. No supervision was thought to be necessary in the cases of 12 children, 3 from Special Schools and 9 from ordinary schools. There was only one appeal to the Minister during the year against the proposal of the Authority to report a child to the Local Health Authority, which was decided in favour of the L.E.A.

Special Classes in Ordinary Schools

There has been no change during the year in the arrangements for special classes for E.S.N. children in ordinary schools. The six classes in five schools in various parts of the City were fully utilised for ascertained E.S.N. or retarded children. Proposals are under consideration for extending the special class provision in two more junior schools in the city and also to make arrangements for the establishment of special classes in a small number of secondary modern schools.

Residential Special Schools

A. L. S.

Kingsdon Manor Residential Special School for educationally sub-normal senior boys continues to provide for those boys who, for various reasons, are not able to continue living at home. At the end of the year there were 46 Bristol boys and 14 boys from other Authorities in attendance at the school, a total of 60. Though the boys enjoy good health on the whole, the private practitioner is very assiduous in his attention to the needs of the boys, and takes a great interest in their development. At this school, as at many secondary schools, there is bound to be an increase in the incidence of verrucae. At a residential school this sort of trouble may be tiresome but can be brought under control by vigorous methods which are taken at the school.

Croydon Hall Residential Special School for educationally sub-normal senior girls, is a similar establishment to that for the boys. Educationally sub-normal girls tend to need residential care because of defective home conditions; quite commonly girls are admitted because of offences against them, and this tends to over-weight the school with this particular kind of problem. The number of girls from Bristol in need of residential care was half that of the boys, there being 23 at the school at the end of the year, with 14 girls in attendance from five other Authorities, making a total of 37.

A particular difficulty in the way of admission of pupils to any residential school is the age at which this occurs. To wait until a girl is say $13\frac{1}{2}$ — $14\frac{1}{2}$ years, as has happened in the case of four admissions during the year, is unfortunate in that their problems tend to be tied up with those of adolescence. Girls such as these tend to need remedial work, and one feels that the proper social measure should be to aim at getting girls into such a school at the age of eleven. The occasional child with epilepsy in a

residential school presents a very special problem, and one ought to admit such children only after knowing all the circumstances, and then perhaps only on trial for a time. Girls more than boys tend to live on their emotions, and Miss Davies, the Head of the school, contributes a special annotation giving an impression of life in a residential school for E.S.N. girls.

In addition to the children at the Authority's residential special schools, the following children were being maintained in independent schools for E.S.N. children:

	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Spring Hill School, Ripon	1	—	1
Besford Court R.C. School, Worcestershire . .	4	—	4
Crowthorne Special School, Edgworth, Lancs. . .	1	—	1
Maristow House School, Devon	—	1	1
St. Joseph's R.C. School, Cranleigh, Surrey . .	1	—	1
Clyffe House School, Dorset	3	—	3
St. Christopher's School, Bristol (Residents) . .	—	1	1
St. Christopher's School, Bristol (Day pupils) . .	7	1	8

Delicate and Physically Handicapped Children

B. J. Boulton

Periton Mead Residential Open Air School

During the year the school has continued to serve the needs of delicate children and others who were considered to be in need of residential treatment.

As was the case in 1955, in our experience there has been a continued fall in the numbers of what may be called the "old type" open air school case. There has been an increased demand for places from outside Authorities.

During the year, a number of children from problem families have been admitted to the school. They may or may not be delicate or underfed. We are often asked if such children gain or lose in the long run, if in six or twelve months, they are returned to the same home conditions from which they were removed. This, of course, is a matter of opinion. A number of them do not return to the same conditions. The others, we think, probably derive a lasting benefit from the good conditions and from the training they receive in hygiene and social behaviour. There were 51 children, 26 boys and 25 girls on the register of the school at the end of the year.

South Bristol Open Air School for Delicate and Physically Handicapped Children

The work of the school has continued throughout the year which gave us very few opportunities for outside activities.

We are receiving more cases of chronic and disfiguring skin disease from our local dermatologists. They appreciate the fact that the full-time nurse at this school can ensure that treatment is carried out regularly and skilfully.

The following is a summary of the diagnoses of the physically handicapped children attending the school at the end of 1956:

Old poliomyelitis	21
Pseudo-hypertrophic muscular dystrophy ..	5
Cerebral palsy	5
Heart disease	3
Old T.B. spine	2
Birth injury	2
Colostomy	1
Post traumatic hemi-paresis	2
Post encephalitic rigidity	1
Spina bifida	1
Post operation for cerebellar tumour	1
Hydrocephalus	1
Congenital dislocation of the hip	1
Collier Adie Syndrome	1
Fröhlich's Syndrome (extreme obesity)	1
Juvenile gout	1
Lymphangioma of tongue	1

South Bristol Open Air School

C. Williams

The school was unfortunately without the Headmaster, Mr. L. S. F. Bone, from Easter onwards, owing to ill-health which compelled him to retire at the end of the Summer Term. All were grieved to hear of his passing on the 22nd December, 1956, after such a short retirement. He had been Head Teacher for eleven years; his work will be long remembered.

During the period under review the dining-room was re-decorated in bold and attractive colours and the children enjoy their three meals each day in an atmosphere of cheerfulness and cleanliness.

Additional improvements to the school include better facilities in the physiotherapy department. The re-arrangement of the power plugs enables the equipment, which includes a more efficient infra-red lamp, to be used in all parts of the room. Space heating has also been improved so that treatment requiring removal of all but the undergarments may now be given at the school instead of at the clinic or the hospital. This means a saving of school time for some children and has also cut transport costs.

The attendance at the school of a representative of Remploy, when the orthopaedic surgeon visits the school and at other times, has been found to speed the repair of appliances and, consequently, the return of the children to school.

There were 113 children on the roll of the classes for delicate and physically handicapped children at the end of the year as follows:

	Boys	Girls	Total
Delicate	36	23	59
Physically handicapped	30	24	54

Physically Handicapped Children in Residential Schools

There were also six physically handicapped children being maintained at various residential schools for physically handicapped children as follows:

	Boys	Girls
St. Rose's R.C. School, Stroud	—	2
Coney Hill School, Margate	1	—
Hinwick Hall, Wellingborough	1	—
Lord Mayor Treloar's School, Alton ..	2	—

Convalescence

During the year 56 children (21 boys, 35 girls) who had been recommended by the medical officers of the Authority for varying periods of convalescence were admitted to Pamela Wills Convalescent Home, Chew Stoke, which is administered by Winford Hospital. A few children were also sent for periods of convalescence to other convalescent homes.

Home and Hospital Teachers' Service

C. Williams

Home Teaching

The valuable work of the two peripatetic teachers in providing home-bound children of school age with some contact with our education service has continued.

There has been a slight drop from the average number on the teaching list mentioned in the 1955 report. At the end of the year there were 20 pupils (15 boys and 5 girls) receiving tuition. It will be seen that boys are again in the majority—as they are in the Day Open Air School.

During the year 24 new pupils (16 boys, 8 girls) were listed, and pupils continued to be visited, on average, thrice weekly. The teachers' joint total of visits was approximately 1,700. 22 children's names were removed from the register for the reasons given below:

	<i>Boys</i>	<i>Girls</i>
Returned to ordinary school	9	7
Admitted to convalescent home	—	1
Admitted to Day Special School	1	—
Admitted to Residential Special School ..	—	1
Admitted to training centre	1	—
Left city	1	—
Died	1	—
	<hr/> 13	<hr/> 9
	<hr/>	<hr/>

Hospital Teaching

C. Williams

As was mentioned in the report for 1955 a proposal was being considered by the Local Education Authority for the appointment of a second full-time teacher for the hospital teaching service. Mr. Cleary, who was appointed in April, 1955, resigned his appointment at the end of 1956 and he was replaced by Mr. Meese, who will be taking up duty in January, 1957. The second teacher, Mr. Haigh, was appointed in April. It is now possible to provide teaching facilities for children at Southmead Hospital and the Bristol Royal Infirmary in addition to the Children's Hospital.

During 1956 five hundred and thirty-three children have been taught at the three hospitals. Over four thousand teaching periods have been given to these children, of whom 20 per cent are from the county areas adjacent to Bristol.

The aim is to provide education suited to the physical needs of the children as well as their age, ability and aptitude. The full age range from five to fifteen plus may be found at one time in the group of children in one ward. It follows that the number of children in any particular age group is very small. The native ability of the children varies greatly and as they come from differing homes and from all types of school there is little common experience or training on which to rely. It is necessary first to discover the stage the children have reached in the basic subjects. In difficult cases this can usually be done by contacting the children's own school. Often gaps have been caused in their education by ill-health. We have to attempt to bridge these gaps and then continue the children's education.

In most cases the children are taught individually in bed. Yet for the development of their personality some group activity is desirable. This is carried out within the limits imposed by the children's health and by hospital routine. As there is no room set aside for school work at either the Children's Hospital or the Royal Infirmary, all teaching has to be done in the wards with all the interruptions of hospital routine and, being teaching hospitals, groups of students as well. At Southmead Hospital a cubicle in the children's ward is provided for the teacher to use as a classroom for ambulant patients. However, the older children in the adult wards still have to be taught, at the bedside, often without even a screen to prevent interruptions.

As well as for the children who are in hospital for long periods, it has been found possible to provide art materials and reading matter for other patients whose stay in hospital has been shorter. The Schools Department of Bristol Public Libraries has loaned books for use in the hospital. These have been greatly appreciated by the older children for whom books are in short supply.

In all the hospitals contact has been maintained with the Occupational Therapy Department who deal with all the craft work and recreational activities for the children. The Medical Records and Almoners' Departments have also helped to provide a liaison between teachers and children in the adult wards. The medical and nursing staff at all the hospitals also give every assistance.

Epileptic Children

A. L. S.

There is no great change in the position concerning epileptic children. It is still possible to place children needing residential placement at either Chalfont or Lingfield. Most Heads of our schools are willing to accept the special responsibility which is placed upon them by accepting an occasional child with epilepsy which is generally controlled by drug treatment. Only one child was on home tuition because of severe and relatively uncontrollable epilepsy.

At the end of the year the following children were being maintained at residential schools for epileptic children:

	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Chalfont School for Epileptic Children, Bucks ..	5	—	5
Lingfield School for Epileptic Children, Surrey	2	—	2

Spastic Children

Cerebral Palsy Assessment Clinic

Grace E. Woods

During the year 1956, the Cerebral Palsy Assessment Clinic has been held three times a month at the Bristol Children's Hospital under the direction of Professor A. V. Neale and Dr. A. L. Smallwood. Old cases are frequently under review to ascertain progress with treatment and to make sure that educational placements are satisfactory. New cases are continually being referred, and to date, over 400 cases have been assessed. During the year the new cases have, more often, been very young children or mildly affected cases.

Very young cases have been referred from the hospital follow-up clinics. It is the practice in Bristol for all the premature babies and babies showing cerebral symptoms in the neonatal period to be reviewed at regular intervals by the paediatric staff of the hospital. From this follow-up, many early cases, quite a number under a year of age, have been referred to the Cerebral Palsy Assessment Clinic. The value of this early assess-

ment cannot be over-estimated. The parents are given as clear a picture as possible of the problem, and are shown by Dr. Helen Gibb the way in which they can co-operate. The intelligence of the child is estimated by Mr. R. V. Saunders, Senior Educational Psychologist, who has the opportunity of seeing the child and recording progress several times at intervals of six months before making a final decision on the child's educability. All these young children are receiving physiotherapy, and because of this early treatment no fixed deformities which are so characteristic of cerebral palsy, are developing. It has been interesting to note how early a fixed deformity can occur. A scoliosis which could be corrected with treatment was noted in an athetoid child of thirteen months, but a scoliosis which was much more intractable to treatment occurred in a child of eighteen months. Twice a fixed flexion deformity of the knees was noted by two years of age.

The other common type of case referred has been the mildly affected child. These are of particular interest to School Medical Officers. These cases have been brought to our notice by the school staff through the School Health Service, or have been referred from the Child Guidance Clinic. The complaint is that the children are fidgety and awkward in school and backward in school work. Some of these mild cases may appear normal children when seen alone in a clinic, but in a class of normal children they stand out as being obviously abnormal children. A school teacher's report that a child has defective movements is always of significance.

The differential diagnosis is roughly between a form of cerebral palsy, chorea, or an emotional disturbance. An unexpected finding in most of these cases has been a history of birth abnormality, either a premature birth or neonatal asphyxia or jaundice with cerebral symptoms. The children are suffering from cerebral palsy and in most cases they have been mild athetoids. There is a tendency for their heads and arms to move in an unco-ordinated manner, and an important fact from the point of view of school education is that their hand control is worse than their leg control. The walking may not be very abnormal; but their hand movements are shaky and unco-ordinated. This is a factor in their poor school attainments.

In quite a proportion of cases of cerebral palsy there is a high frequency deafness, and this must be considered in any examinations of these children. It was found to a handicapping degree in one child who had at first been thought fit for ordinary school. There must be other missed cases of this type.

The subject of cerebral palsy continues to show new fields of interest. During the year research work has been started in Bristol in various branches of cerebral palsy which has been financed by the National Spastics Society, and with the co-operation of the workers in all the different specialities. It is hoped that some interesting findings will be published later.

Claremont School for Spastic Children

M. Ram

During most of the year we have had thirty-one children on the register, twenty-three from the Bristol area and eight from the Gloucestershire, Somerset and Bath Authorities. Three have been transferred to other schools, two to ordinary school and one to the Day School for Physically Handicapped Children and two have been referred to the Mental Health Authority.

Two changes have been made in the staffing of the school. Teaching difficulties had arisen, partly because more of the children with hearing

disabilities had reached or were approaching school age, and partly because of our increased age range which was three to seven when the school started, and is now three to eleven plus. An additional teacher was appointed in September, and the children above the nursery stage are now in three groups, though we still find it necessary to divide their time between individual and group work.

The children with hearing difficulties are creating problems for the speech therapist, and we were also getting a higher proportion of the other children requiring treatment from her. We were therefore granted an extension of speech therapy from a half-time to a full-time speech therapist, and Miss Bolwell commenced full-time work at the school in September. The children have derived much benefit from having her as a full member of the staff, as it has been possible for her to supervise speech activities in the school as well as in the treatment room. Accurate recordings of the children's speech are necessary, both for the children's guidance and to assess progress. We now have our own tape recorder, and a room has been adapted for this work and for speech therapy by the fitting of acoustic tiles and a cork floor covering.

We have been grateful to Miss Sharwood and the staff of Elmfield School for Deaf Children for advice on the handling of our children with deafness and we hope soon to have some sessions from the peripatetic teacher of the deaf.

The Parent-Staff Association has continued to meet each term. Talks and a "Brains Trust" on the problems of cerebral palsy have been held; Miss Hack, the senior physiotherapist, arranged a demonstration on methods of handling these children at school and in the home. Funds raised by the Association have been used to buy typewriters and other equipment for the school, and to give the children a Christmas party. Parents are accustomed to give voluntary help at the school; some mothers come in for a day each week to work with the physiotherapists, others act as escorts in the cars and fathers have made or repaired many toys and pieces of apparatus. Much in this work depends on a good "carry-over" from school to home, and vice versa, and we hope that as the Association develops we may find other ways in which we can work together.

HEART DISEASE AND RHEUMATISM

C. Bruce Perry

The work of the Cardio-Rheumatic Clinic has continued as in previous years. With the decline in the incidence of acute rheumatism and rheumatic heart disease, congenital heart disease is assuming greater importance as a cause of heart disease especially in childhood. This has coincided with rapid developments in the surgical treatment of congenital abnormalities of the heart, and an accurate diagnosis of the precise anatomical abnormality in the heart is now becoming of paramount importance. This often necessitates highly specialised studies, and frequently it is a difficulty to decide whether or not to subject a child to these investigations. With the help of the Nuffield Foundation, a register of all cases of congenital heart disease seen in Bristol is being maintained in the University Department of Surgery in the Royal Infirmary, and a group of those interested in the problem of congenital heart disease meets regularly to discuss cases.

Methods of preventing relapses of acute rheumatism in rheumatic children are still being studied and definite recommendations can now be made. In October 1956, W.H.O. held a meeting of experts who drafted a report for the Organisation on the prevention of rheumatic fever. Not only is it now possible to prevent children who have had acute rheumatism

from developing a second attack, but there is every reason to believe that the efficient treatment of all sore throats due to the haemolytic streptococcus would prevent first attacks. The difficulty is that "efficient treatment" to achieve this end means far more than treatment necessary to "cure" the sore throat. It is essential that the causal organism should be eradicated from the sore throat and this is a far more difficult object to achieve. Acute rheumatism occurring in children of school age has now been a notifiable disease in Bristol for eight full years. It is interesting to note that the decrease in the incidence, already commented on and noted in previous reports, is continuing. In 1948 the incidence of attacks of acute rheumatism amongst Bristol school children was over 89 per 100,000. In 1956 the comparable figure was 27·5 per 100,000.

Summary of Cases attending Cardio-Rheumatic Clinic, 1956, including Primary, Secondary, Grammar and Nursery Schools

	No treatment or restriction	No treatment but restriction of games, etc.	Treatment and school	Treatment and exclude from school	Institutional treatment	TOTAL
<i>New Cases</i>						
Rheumatic Heart Disease	4	—	—	—	12	16
Chorea	—	—	—	—	2	2
No Organic Disease ..	28	—	—	—	—	28
Congenital Heart Disease	7	2	—	—	—	9
Various	—	—	—	—	—	—
	39	2	—	—	14	55
<i>Re-Examinations</i>						
Rheumatic Heart Disease	217	12	—	8	7	244
Chorea	9	—	—	—	2	11
No Organic Disease ..	362	1	—	—	1	364
Congenital Heart Disease	76	16	—	2	1	95
Various	18	—	—	—	—	18
	682	29	—	10	11	732

No. of individual children examined 464
No. of new cases for 1956 55
No. of re-examinations 732
Total number of attendances 787

Prophylactic Treatment for Children who have had Acute Rheumatism or who have Congenital Heart Disease A.L.S.

In the course of the year some special advice was received from Professor Perry on the prevention of a recurrence of rheumatism in children who had already had it and the protection of rheumatic subjects against the ill effects of dental extractions, the substance of which is as follows:—

There are two risks for patients who have had acute rheumatism or who have rheumatic heart disease: one is that they may develop a recurrence of acute rheumatism, and the other that they may develop a superimposed bacterial endocarditis on top of the rheumatic heart lesion. Children with congenital heart disease, while obviously not at any special risk as regards the development of acute rheumatism, are liable to the same risk of bacterial endocarditis. It is therefore suggested:

1. That all children who have had an unequivocal attack of acute rheumatism should receive prophylaxis against *haemolytic* streptococcal infections until they leave school. This may be achieved broadly in one of three ways:

- (a) The daily administration of sulphonamide in doses of $\frac{1}{2}$ to 1 gm. depending on the child's age. Sulphadimidine is probably the drug of choice.
- (b) The daily administration of oral penicillin 200,000 units twice a day. Possibly phenoxymethyl penicillin is more effective (Penicillin 120 mg. twice a day).
- (c) A monthly intramuscular injection of benzathene penicillin, Penidural L-A, 5 cc.

2. That *any* patient who has *any* abnormality of the endocardium, whether congenital or acquired, is always in grave danger of developing on this abnormal endocardium a superimposed bacterial endocarditis. This risk is at its highest if the patient undergoes any operation on the nose or throat or has a dental extraction as all these procedures are inevitably followed by a bacteraemia with the streptococcus *viridans* which is the commonest organism to give rise to bacterial endocarditis. Therefore, all patients with any form of endocardial lesion having an ear, nose or throat operation or dental extraction should only have this performed under full cover of penicillin.

Sulphonamides are useless for this. Penicillin must be used in much larger doses than for the prophylaxis of haemolytic streptococcal infection. Streptococcus *viridans* is not so sensitive to penicillin as is the haemolytic streptococcus. At the moment we think that an adequate cover is given by one injection of two million units of procaine penicillin in aluminium monostearate the day before operation or extraction. As an alternative it would seem feasible to employ oral penicillin but in a larger dose, say phenoxymethyl penicillin 120 mg. four-hourly for twelve hours before and for twenty-four hours after the operation or extraction.

This advice has been circulated to all the doctors and dentists on the Authority's staff. Fuller notes of Professor Perry's views are available in the medical press.

INFECTIOUS DISEASES

A. L. S.

In spite of the relatively poor weather this year there has been comparatively little infectious disease affecting school children. As was to be expected there was little measles, as the previous year was, of course, notable for the large number of children affected with this disease. Fewer children suffered from whooping cough than in any year since 1949 but the cause of this diminution is difficult to decide. It is not thought that immunisation has had an appreciable effect on the number of cases.

The figures relating to infectious diseases during the year are given below:—

				<i>School age children</i>	<i>Under school age children</i>
Measles	..	..	..	145	199
Whooping cough	..	..	..	281	412
Scarlet fever	..	..	..	213	102

Admissions of patients of school age to the Infectious Diseases Hospital at Ham Green during the year totalled 204, the average stay per patient being 21·5 days.

Poliomyelitis Vaccinations

There were only 3 cases of poliomyelitis amongst children of school age during the year. Towards the end of May a supply of poliomyelitis vaccine was received from the Ministry of Health, and it was possible to offer vaccination to children of certain age groups. The arrangements were that of the children who had been registered by their parents for vaccination, children in the appropriate months of birth were selected and given appointments to attend the clinic nearest their homes. Altogether 1,377 children of school age had received a complete course of two injections up to the end of the year, and a further 86 children had received the first injection. This was less than the number which it was hoped we should be able to do and a good deal of work of an administrative nature was involved. The parents generally welcomed the opportunity to have their children immunised and a good proportion of those offered appointments attended. All of this work was done by the Local Authority's medical staff, but when the supply of vaccine becomes more plentiful it is hoped that general practitioners will share in this work also.

Immunisation against Diphtheria

The immunisation of children against diphtheria was continued on the lines of previous years. The emphasis is on the immunisation of children during the pre-school years with a booster injection just before entering school, or in the early years of school life. Once more there has been no case of diphtheria amongst children of school age during the year; the disease has become a rarity, no case having occurred in the City for seven years.

There is a danger of complacency on the part of parents in this freedom from the disease, and from the experience in other towns there is a likelihood of an occasional case of diphtheria arising which there will be a risk of failure to recognise. It cannot be supposed that parents' interest will remain sufficiently high to maintain a high level of immunisation. Administratively it becomes a difficulty whether to advocate repeated campaigns to secure sufficient acceptances for immunisation, in the absence of the disease or to wait until the risk is more obvious. It must be

remembered that each immunisation campaign attracts more and more of the doctors' time away from their fundamental duty of medical inspection.

The figures of immunising injections given during the year to children of school age are as follows:—

Number given full course of immunising injections ..	124
Number given booster injections	2,180

MEDICAL EXAMINATION OF ENTRANTS TO THE TEACHING PROFESSION

A. L. S.

In accordance with the arrangements outlined in Ministry of Education Circular 249, the medical examinations of candidates applying for entry to training colleges and entrants to the teaching profession, were carried out by the Medical Officers of the Local Authority. During the year 213 candidates resident in Bristol were examined in connection with admission to or on leaving training colleges and also 183 teachers were examined on appointment in Bristol or for some other reason.

MEDICAL INSPECTION

A complete periodic medical inspection was made during the year of 18,477 children attending the Authority's primary and secondary schools. The statistical tables relating to these examinations will be found at the end of the report.

Co-operation of Parents

The number of parents present at primary and secondary school medical inspections during the year was as follows:—

	No. <i>examined</i>	Parents <i>present</i>	<i>Percentage</i>
Entrants	6,378	5,587	87.75
Second age group	4,210	3,194	75.87
Third age group	4,597	1,210	26.32
	<u>15,185</u>	<u>9,991</u>	<u>65.79</u>

A table is given below of the percentage of attendances of parents at periodic medical inspections in schools over the past five years. It is apparent that although the percentage varies from year to year there is no particular trend, the percentage of parents attending with the children examined as entrants in 1954, 91, seems to be unaccountable against the percentage in 1952 of 79. The highest percentage of parents attending the leavers' examinations, 28 in 1955, contrasts with the lowest percentage in 1952 of 26.2, which has just been referred to as contained the highest number of entrants.

The second age group seems to be fairly constantly represented at 70–75 per cent. The percentage of attendances of parents in 1956 seems to show an average interest in the medical inspection of the children. Every facility is given to encourage the parents to attend at medical inspections. As far as possible timed appointments are given for attendances at the schools and the parents are given a reasonable opportunity to discuss with the doctor, the nurse, and the head of the school the health of the children. We have reason to believe that, by and large, parents appreciate the system.

Percentage of parents present at periodic medical inspections 1952–56.

	1952	1953	1954	1955	1956
Entrants	79.87	87.61	91.54	87.93	87.75
Second age group	57.50	72.81	74.11	76.24	75.87
Third age group	26.20	25.90	25.43	28.17	26.32

MEDICAL INSPECTIONS IN SCHOOLS

A. L. S.

The School Health Service and Handicapped Pupils Regulations of the Ministry of Education require that the arrangements made by the Authority for the medical inspection of pupils attending schools maintained by the Authority shall ensure a general medical inspection of every pupil on not less than three occasions at appropriate intervals during the period of his compulsory school age, and other medical inspections of any pupil on such occasions as may be necessary or desirable. The existing arrangements are that children are seen by the doctor—

- (i) on entry to school as soon as possible after the age of 5.
- (ii) in the last year at the primary school at 11 years of age.
- (iii) If the child goes to a secondary modern school in the last year of his school life at the age of 14. If he goes to a grammar school he is seen in the first, third and fifth years of his attendance there.

In addition to the doctor's inspections the children are supervised by the school nurse who sees them on the average one and a half to two times per year. This applies in the primary and secondary modern schools. In the case of the grammar schools, however, the nurses do not carry out the health enquiry and this is very largely left to the physical education teachers who form a close relationship with the doctor and carry out in an admirable manner the general health supervision of the pupils.

For some time I have been rather concerned about the big gap between the first medical inspection at the age of 5 and the second at 11 years of age. This is a time of great change in the physical and intellectual character of the child and there has always been much to be said for having an inspection carried out at the age of 8 years. With the introduction of secondary schools with grammar and modern pupils a further problem is arising. As mentioned above, it has been the custom to inspect children in the grammar schools in their first, third and fifth years in the school. In the secondary modern schools one doctor's inspection is carried out in the last year of the pupils' attendance. In future many children will be together in one school whether they are of secondary modern or grammar school status and it will be invidious and impracticable to have two systems of medical inspection operating for the two streams in one school. It was therefore suggested that the system now applied to the grammar schools should apply to all secondary schools; that is, all children should have a medical examination at the age of 12 years, when first entering the school, and at age 14 when, in the case of secondary modern pupils, they will be in their last year of attendance, with a further examination at 16 for those pupils who stay on in the grammar school stream. Since this arrangement would leave a long gap between the 5 and 12-year inspections it would seem appropriate to consider the introduction of an intermediate medical inspection at the age of 8 years to replace the present inspection at 11-plus years. The advantages of an inspection at this age are that it would come when the child had just entered the junior school and it would therefore be of great value to the teachers in the new school. At the age of 8 the child's intellectual ability can reasonably be assessed and a backward child could be picked out and provision made for him. This time also is a period of quicker growth and physical defects may be more easily observed and remedied. At this age also a child can be relied on to give a good response to vision and hearing tests.

There has been some pressure that we and other local education authorities should experiment by trying other systems of inspection, perhaps of a more complete entrant and leaver examination with a modified follow-up system, and leaving more responsibility to the school nurse. It might be profitable to make arrangements like this in one or two schools before attempting any major change in policy. Another factor which has to be borne in mind is the fact that the public has been continuing to expect a visit of the doctor at intervals to see the children, and indeed the teaching staff are often uneasy unless they have adequate access to medical advice. Teachers vary in this regard. Some make their own relationships with the school doctors but for others more stereotyped arrangements seem to be necessary and it is with this latter group in mind that one is driven to advise the revised system. It is still of course highly desirable that the school doctors should be well known to the schools which they attend, and this argues of course that they should serve the same limited group of schools. This is particularly difficult to achieve in a large densely populated community with the constant and varying calls on the doctors' time. With this new system a child would be seen by the doctor on his first appearance in each of the three school divisions which most children attend during their school life. Many of the teachers have expressed to us the need for them to know all the medical qualities of their children as soon as they enter their schools. One cannot conclude a comment of this kind without reference to the clerical side of the re-arrangement. Efficiency in handling of medical documents depends upon the employment of skilful and numerically adequate clerical staff. Very often the work requires a knowledge of medical terminology which it takes up to two years to acquire. If there is a constant change of staff, individuals have no time to acquire the necessary qualities and this is bound to mitigate against the efficiency of the service. This matter of knowledge of medical terminology is often forgotten in comparing the duties in the School Health Service with those in other parts of the Local Authority Service.

MILK AND MEALS IN SCHOOLS

T. B. J. Hetherington

The annual return taken in October showed that 22,861 children were taking school dinners (1,672 free and 21,189 on payment) or 37·94 per cent of the number of children in attendance. This is an increase of 1·5 per cent over the figure for 1955. New kitchens were opened at Brislington Secondary, Four Acres Primary, Henbury Court Infants', Highridge Infants' and Speedwell Secondary Schools.

There were 54,015 children taking milk, under the milk-in-schools scheme, a percentage of 87·62 of the children in attendance. This showed a slight decrease as the figure for 1955 was 88·53 per cent.

The percentage of meals taken each day increased over this period, despite the fact that 1d. was added to the charge for the meal in September. An acceptance rate of up to 80 per cent of attendance has been reached in some of the newly opened schools; this applies particularly to the secondary age group and may be accounted for partly by wider travelling distances, although in the main there is a definite indication of increased numbers throughout the City. It has now been agreed that new kitchen and dining accommodation be planned for at a higher level—i.e. Primary 55 per cent instead of 45 per cent, and Secondary 65 per cent instead of 55 per cent.

Building was started on four major kitchens and dining schemes during this year. These are the first major building projects to be passed by the Ministry of Education for existing schools for many years. These were selected because of generally poor conditions and in order to self-contain more meals, thus reducing the percentage of container meals. Unfortunately, several other similar projects have had to be postponed.

Further surveys have been and are being made on the hygienic standards of kitchens and wash-ups. In order to comply with the 1955 Food Regulations, working surfaces are being replaced or retopped with a hard plastic finish, additional wash basins and low-level shelving installed, etc. Roller towels are being replaced by individual towels. All these points will, of course, take some time to cover completely owing to the expenditure involved.

MILK, FOOD AND HYGIENE INSPECTIONS F. J. Redstone

The principal public health inspection activities in connection with schools are the regular sampling of milk supplied to scholars, spot sampling of foods purchased by the Corporation for use in school meals, and the investigation of outbreaks of sickness.

During the year 207 samples of pasteurised milk were secured for examination, all of which passed the phosphatase (heat treatment) test, but one failed the methylene blue reduction (keeping quality) test.

The methylene blue test was not applicable to 62 samples secured on seven different days, owing to the atmospheric shade temperature having exceeded 65° F. The Milk Regulations stipulate that under such circumstances, this test may not be recorded.

A total of 223 samples of foods supplied to the following school kitchens were secured for analysis: Bannerman Road, Merrywood, Blaise, Stoke Bishop.

An excess of tin was found in one sample of canned fruit and a quantity of ice cream wafers and dried vegetables had deteriorated. These foods were unfit for human consumption and were destroyed.

Two outbreaks of suspected food poisoning were investigated. One occurred at Portway Girls' School, where 25 scholars and staff were ill with typical symptoms. No food consumed at the school was obtainable but a sample of powder from which a cream was made, and faecal specimens from some of the patients were submitted for examination with negative results. Another incident arose at Sefton Park School where several scholars were ill soon after lunch. A confection made by a cookery class was suspected but samples of this and of the ingredients used were found to be satisfactory.

A considerable outbreak of dysentery occurred at Barton Hill Nursery. Sixty-three positive cases were found. The 616 visits made by the Public Health Inspectors to 177 families revealed another 42 positive carriers at 15 other schools. Amongst the relatives 29 food handlers were found, of whom 6 returned positive faecal specimens. Some of the children continued to excrete infection for several months.

Lectures on food hygiene and other public health subjects to trainee teachers included one on the legal control of milk.

FOOD POISONING

A. L. S.

The following notes on an outbreak of alleged food poisoning at one of the Authority's schools illustrates the difficulty of reaching a conclusion as to the true cause and nature of the illness.

The Head reported that out of a class of fifteen girls aged 12—13 who had attended a domestic science lesson at the school in the morning, ten had become ill in the early afternoon with stomach pains and sickness. None had had diarrhoea though two had had a normal motion during the afternoon.

The domestic science lesson consisted of making flapjacks. These were made from ingredients brought by the girls and each child used 4 oz. of rolled oats, 2 oz. sugar, $1\frac{1}{2}$ oz. margarine, 1 tablespoon golden syrup, $\frac{1}{2}$ teaspoonful of salt and one or two drops of vanilla. The only ingredient which was used from the stock cupboard of the school was the vanilla essence. The mixture was placed in a pre-greased tin and baked for thirty to forty-five minutes at a temperature of 350° .

When the flapjacks were finished, they were cooled and the girls were advised not to eat them that day. However, most of them did. Most of the girls went home for dinner and the illness with vomiting commenced in all cases between 2.10 and 2.45 p.m. The girls were pale and rather shocked. They were treated by hot drinks and wrapping in blankets and coats, etc. All of them had recovered by the time school finished, sufficiently for members of staff to take them home in their cars and the position was explained to the parents. The following Monday all except two had returned to the school although there were vague complaints of headaches in one or two of those who did return.

Of the five girls who did not get ill at least one had partaken of the flapjacks and there was one who definitely did not eat any. In addition five boys had eaten various amounts of flapjack but none of them had any ill effects.

The practice was that the girls were advised that they could grease their tins with fat which they had brought from home or they could use the school stock of lard. This lard had been used the day before without any ill effects. It had been warmed up and allowed to cool over night in a jar, so that there is a bare possibility that it might have acquired an organism from use on the previous day. On the other hand it seems unlikely that any organisms would have survived the heat process in the warming of the lard and particularly the heat used in cooking the flapjacks.

On the face of it this outbreak was the result of a toxin; however, the bacteriologist was unable to recover any organisms from the ingredients supplied and indeed expressed polite scepticism about the presence of a causative organism. He inclined rather to a belief in epidemic vomiting as the cause, there having been quite a little of this disorder about at the time. Intensive enquiry was made amongst the pupils at the school with no evidence of epidemic vomiting. Only one boy, who in fact had flapjacks without any ill-effect, had a sister and brother, not attending this school who had stomach upsets, pain and vomiting, about the same time as this incident. It is a little difficult from our knowledge of epidemic vomiting to support this theory. Most of the affected children were ill within an hour of each other and were all from the same form. There was very little, if any, evidence of mass emotional upset and the incident otherwise had every appearance of a toxic attack, but how the girls got it, was, and will remain, a mystery.

MINOR AILMENTS

A. L. S.

Three new clinics were opened during the year, two—the Mary Hennessy Clinic, Hartcliffe, and the John Milton Clinic, Brentry—to serve new housing estates on the outskirts of the City, and one—the Charlotte Keel Clinic, Stapleton Road—in a congested area near the centre of the City. One small difficulty which had been experienced in the clinics in the new housing estates is due to the fact that the number of children in the area is at the moment smaller than will ultimately be the case when the site is fully developed. The principle has been adopted that doctors' inspection sessions are arranged on two sessions per week sometimes in conjunction with infant welfare sessions. Minor ailment treatment is available each day and in accordance with our custom each school served by the clinic is given a time at which to send children for treatment. These peripheral clinics are much appreciated by the schools and the parents who, prior to the opening of the clinics, had to take their children a considerable distance for medical attention.

Ringworm

A. L. S.

The number of cases of scalp ringworm has fallen so low that it has not been found necessary to maintain the previous arrangements whereby a School Medical Officer attends the appropriate consultant session at the Bristol General Hospital. It has now been decided to allow those few children who were chronically infected with ringworm to attend school, provided the scalp is covered with a protective covering in those cases where the parents have refused to allow X-ray epilation. A close watch is kept and there do not appear to have been any untoward effects, and it seems likely that the ringworm in these cases will run its long and self-limiting course.

The number of cases of body ringworm amongst school children treated at the clinics during the year was 360. This compares with 208 in 1955.

Infestation

A. L. S.

There continues to be a steady decline in the percentage of children found to be infested with vermin, a process which has been going on for some years. Critics may argue that this is due to less attention being given to the matter of infestation than used to be the case, but most of the workers in the field accept the view that there has been a real diminution in this problem. There still remains a "hard core" of cases and efforts are being made to initiate prosecutions in some cases to see what salutary effect this will have on these families. Our general policy is to leave the examination of children's heads to the nurses' survey, but children known to be constantly infested are kept under regular observation by the nurse at each visit to the school. In addition where the head of the school requests, and this is often at the beginning of the term, a general inspection of all the children's heads in the school is arranged.

The figures relating to the number of individual pupils found infested with vermin during the last six years is as follows:

				<i>No.</i>	<i>School population</i>	<i>Per cent.</i>
1951	..	..	..	3,016	56,825	5·3
1952	..	..	..	2,674	59,855	4·5
1953	..	..	..	2,990	62,182	4·8
1954	..	..	..	2,773	63,573	4·4
1955	..	..	..	2,347	65,177	3·6
1956	..	..	..	2,133	65,979	3·2

Nursery Schools and Classes

A. L. S.

There has been a slight change in the accommodation in nursery schools and classes during the year, an additional nursery school being opened, making a small increase in the total number of places in the schools and classes. At the end of the year there were 14 nursery schools accommodating 997 children, and 15 infants' schools with nursery classes with accommodation for 468 children. The grounds for priority in the admission of children remain the same as in the previous year, namely, the physical or emotional needs of the child, bad housing or difficult home conditions. The statistics relating to the medical inspections held in the nursery schools and classes during the year are as follows:

		<i>Periodic Exams</i>	<i>Re-exams</i>	
Nursery schools	593	1,588		
Nursery classes	380	761		
Number of special inspections and re-inspections				261

Classification of Nutrition

	Number of children inspected	Satisfactory		Unsatisfactory	
		No.	%	No.	%
Nursery Schools	593	565	95.28	28	4.72
Nursery Classes	380	374	98.42	6	1.58

Treatment of Minor Ailments

The following cases of children under school age were treated at the various clinics during the year:

No. of defects treated in clinics and at schools and classes	3,261
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Treatment of Defective Vision and Squint

Errors of refraction (including squint)	37
No. of pupils for whom spectacles were prescribed	10

Dental Inspection and Treatment

No. of pupils inspected by the dentist—			
Periodic inspections	585		
—Special inspections	89		

TOTAL 674

No. found to require treatment	332
No. actually treated	219
Attendances for treatment	294
Extractions of temporary teeth	271
Fillings of temporary teeth	51
Administrations of general anaesthetics for extractions	144
Other operations on temporary teeth	81

Medical Treatment of the Pre-School Child

Eye diseases	32
Ear diseases	39
Skin diseases	138
Minor ailments	25
Aural Surgeons' cases	59
Eye Specialists' cases	91
Heart Specialist's cases	3
Orthopaedic Specialists' cases	90
Chiropody Clinic cases	5
Skin Consultants' cases	23
Enuretic Clinic cases	18
T.B. Contact cases	169
Children's Chest Clinic	12
Wart Clinic	1
Various	350
	<hr/> 1,055 <hr/>

NUTRITION CLINIC

Margaret Chapman

Since its institution in October 1955, 94 children have attended the Nutrition Clinic with a total of 362 visits. A further 11 children were referred, but failed to attend for initial advice.

The age range was from 5 to 16 years, with 21 children under 10 years of age.

Of the children attending, all but 4 were referred because of overweight, to an extent of at least $1\frac{1}{2}$ stones above the normal for age and height, 24 being over 3 stones in excess, including 9 who were more than 5 stones above normal.

It is difficult to assess results with work of this nature. An initial weight reduction is comparatively easy to bring about, and indeed most of the children do show an appreciable loss of weight when they return for the first time, but the ultimate object is to correct the dietary mistakes which have caused the excessive gain and to establish a sound dietary regime and an understanding of food values, which will prevent this from happening again. This calls for constant encouragement, and a very sustained effort on the part of both the child and parent and is much more difficult to achieve, and achievement to assess; but approximately 65 per cent of the children have continued to attend regularly with about 70 per cent of these showing definite signs of progress, in that weight gain has been controlled over a considerable period.

From the brief dietary history taken at the first visit, it would seem that an excessive amount of carbohydrate in the form of sweets, iced lollies, chocolates and biscuits, is the chief cause of the overweight among these children. This is not necessarily given at the expense of protein, intake of which, in most cases, appears fairly adequate, but rather points to more money being available generally for indulging children's likes and dislikes.

The introduction of television may, in part, account for the excess consumption of sweets, etc., as it appears that fairly continuous eating is an accepted and expected custom when televiewing, many mothers asking what the child can have at such times.

ORTHOPAEDIC AND POSTURAL DEFECTS

A. L. S.

The Orthopaedic Surgeons, Mr. Pridie and Mr. Jones, continued to give a session each per week at the Central Health Clinic by arrangement with the Regional Hospital Board. The type of case seen at the Clinic has not varied greatly during 1956. There has been some slight tendency to diminution of the more serious crippling defects, and only two cases of tuberculosis of bones and joints have been seen, one of school age and one below school age. The number of cases of congenital abnormalities has diminished from 48 in 1955 to 30 in 1956. The clinic service tends to deal mostly with the minor orthopaedic disorders or fears on the part of the school medical officers or parents. It is of course important that these services should continue if only for the relief of anxiety on the part of doctors or parents that children are not developing normally. I think the surgeons themselves appreciate being asked to judge when their help may become necessary in minor deviations from the normal state. Mr. Lucas, the Orthopaedic Surgeon, attends the two schools for physically handicapped children, South Bristol Open Air School and Claremont School for Spastic Children, once a term for the purpose of offering advice on the care and management of particular children.

The details of the children seen at the clinic during the year are as follows:

	<i>Age five years and over</i>	<i>Age under five years</i>
Paralysis (a) Flaccid	54	1
(b) Spastic	29	4
Tuberculosis of bones and joints	1	1
Congenital abnormalities of bones and joints	30	7
Amputations	3	—
Rickets	—	—
Genu valgum	36	28
Various (Flat foot, spinal curvature, etc.) ..	584	51
	<hr/> 737	<hr/> 92

PHYSICAL EDUCATION

J. McA. Milne

One additional new secondary school and three new primary schools with playing fields were opened during the year, in addition to the six new secondary schools opened in the previous two years. Specialist physical education teachers have been appointed to each secondary school and it is hoped that this will raise the standard amongst the older children.

Swimming continues to be a very popular branch of physical education, although many schools have had to cut attendance of some classes at the baths owing to lack of facilities for teaching swimming.

The following figures give an indication of the progress made by children in the City.

<i>Corporation Certificates (4 lengths)</i>					
1953	..	..	..	..	3,067
1954	..	..	..	..	3,850
1955	..	..	..	..	3,817
1956	..	..	..	..	3,270

In addition approximately 1,000 children have obtained the new half-mile certificate which the Baths Committee have instituted.

The construction of a training swimming bath at one of the new secondary schools should make a welcome contribution to the teaching of swimming. This bath should be open next September.

The playing field acreage continues to increase as each new school has a playing field adjoining and the cinder track at Greenway S.M. School is proving a great asset to the City as a whole.

In the secondary girls' schools, the very full curriculum is largely responsible for the small amount of time given to physical education. Dancing, swimming and, when fine, games are usually included each week, but movement training is often confined to two or even one period in two weeks. This is too short a time to give girls adequate experience in all types of movement and results in poor posture and lack of physical skill.

A number of refresher courses was held during the year; these included one for the M.C.C. Coaching Certificate at which approximately 30 teachers attended; a swimming coaching course at which approximately 60 teachers attended, and a country dance course at which a large number of teachers attended. The Medau Society held a week-end course for gymnastics at Redland Training College which was attended by many teachers, old girls of the College and girls who had left school. A very successful athletic course for women was held at Greenway Track. This was attended by teachers and also six schoolgirls.

Two netball tournaments were arranged, one in March, in which 36 teams took part, and one in October for first teams only. This latter tournament combined the usual American type with a "knock-out" tournament between the winners of each section; 24 first teams took part.

During the summer a rounders tournament was held in which 38 teams took part. A coaching evening was arranged after which six teachers entered for the All England Rounders' Association Umpires Test and gained their certificates.

Miss G. Flew, the A.E.W.H.A. Coach, spent two days in Bristol and coached in four areas; 16 teachers were able to attend.

A new field of work was introduced at two schools by the making of a canoe at school with a view to introducing canoeing, as soon as possible, to the older boys.

During the year there was an increased interest in camping, more schools taking part in this worth-while activity. Winscombe Children's Help Society Camp was used by schools for five weeks during the summer.

The under 15 Rugby International, England v. Wales, was organised by the Bristol Schools' Rugby Union in April, and was played at the Memorial Ground. Local schoolboys provided hospitality for the two teams.

The voluntary organisations continue to be very active in the field of major games, particularly swimming, association football, cricket, rugby football, basketball and athletics, and opportunities for taking part are given to all children who show ability in any branch of physical education.

PSYCHOLOGICAL SERVICE

R. V. Saunders

The following table shows how the time of the educational psychologists was occupied in 1956:

Examinations—Child Guidance Clinic cases	..	..	..	361
Psychological Assessments other than C.G.C. cases	..	..	..	706
Juvenile Court reports by Psychologist only	..	..	..	170
Treatment/Coaching interviews	..	..	..	1,239
Parent interviews	..	..	..	160
Other interviews	..	..	..	19
School visits regarding C.G.C. cases	..	..	..	95



Top: Infants erect their own climbing apparatus
Centre: Gaining self confidence
Lower: Nursery children learning by experience



Top: Stretching in different directions near the ground
Centre: Elevation
Lower: Stretching and twisting at different levels

The Assessment of Handicapped Children

The various tests which psychologists use in order to assess the intellectual ability of children depend on the child's ability to understand and reply to verbal instructions, or to perform a number of practical tasks on instruction or demonstration; some intelligence scales are a mixture of both types of test item.

Normal children can be tested without much difficulty by verbal or performance, or mixed verbal-and-performance tests, and it is valuable in making such assessments of normal children to compare their verbal and their non-verbal capacity. Such comparisons may confirm verbal inhibition in a child, or a marked interest in and preference for practical outlets, or a marked preference for verbal self expression as opposed to the more practical medium, or a nice balance of verbal and non-verbal forms of reasoning.

When we are required to assess the intellectual capacity of handicapped children, however, their special difficulties tend to dictate the methods which we can use. For example, deaf children require to be assessed by means which minimise their disability, i.e. by tests which involve no speech or an absolute minimum of speech combined with gesture and demonstration in order to make clear to the child what he is expected to do. Deaf children are therefore tested in a non-verbal or performance medium. Children with severe speech defects require to be similarly treated.

Children with visual disabilities, on the other hand, must be assessed by scales which minimise the amount of visual work to be done. This can be done by using either purely verbal scales or by bringing in manipulative ability with touch, rather than vision, as the guiding agent.

Some children are so handicapped both in speech and in manipulative ability that the use of formal tests is out of the question. In such cases the psychologist is obliged to fall back on systematic observation of the child over a period. The child's reactions to, and awareness of, and alertness in his physical and social environment is studied in detail, and observed at regular intervals—the child's rate of development in various directions being taken as a guide to his probable rate of development in life.

The experienced psychologist who is well versed in his, or her, techniques is able to use these more or less mechanically and is able to concentrate on the individuality of each child's responses on the assessment situations. No two children respond alike even in the most standard situations and it is this repeated reminder of the uniqueness of each one of us that prevents this type of work from ever becoming mechanically routine or humdrum.

SPEECH CLINICS

Southern Area

Kathleen Coleman

This has been a year of progress and achievement, to a great extent due to the enthusiasm and intelligence with which the children have worked.

By willing co-operation of the Heads of the schools it has been possible to hold clinics in the junior boys' and junior girls' as well as the infants' school at Connaught Road. Considerable benefit has resulted from this. The children have responded well, working with intelligence and interest.

In the junior girls' school two children who were not talking at school, and one who was becoming increasingly withdrawn, have become happy, adjusted members of their class. The latter is now a class prefect.

In the junior boys' school most of the work has been with boys who stammer, and much has been achieved, all of them working well and gaining improvement in speech. Clinics have also been held at Knowle School and at Granby House Clinic.

Our particular method of treatment used with stammerers is developing and improving and is to a great extent responsible for the larger number of children treated this year without any appreciable difference in the number of attendances. Results are quickly forthcoming and appear to be established, possibly due to the fact that with severe stammerers, daily treatment is the custom if it is possible, and teachers are in favour of this because the results shown are encouraging.

An interesting feature is the enthusiasm with which many children attend daily or even twice daily during the holidays, often at their own suggestion. Working at these times the child is free from the pressure of school life, and more easily able to benefit from the relaxation, which is the basis of the work. Boys in particular, appear to enjoy daily treatment. One young man who had attended twice daily, by request, during a ten-day holiday remarked, "Jolly good, best holiday I've ever had."

From the therapist's point of view, daily treatment with severe cases is admirable. Each treatment helps to consolidate the previous day's work. The severe stammerer, however willing, is hampered by his tension in putting into practice what he has learned. By working daily, the habitual tension does not build up, as it so often does in the interval between weekly attendances and it is possible to start work to good advantage each day.

With difficult cases of dyslalia and other speech defects, noticeable advance in improvement is attained by treatment.

Very shy, withdrawn children, who refrain from talking, though well able to do so, have again been a prominent feature of the clinic this year. With some of these, simple relaxation as well as play therapy has proved helpful, especially with children about to start school.

Pauline—aged seven years—is a twin, protected and spoken for by her brother twin. At school she refrained from speaking and burst into tears if spoken to. After four weeks therapy at the clinic, the school reported that when asked to read she laughed, was eager to be first, was now happy in everything. Her mother, however, reported continuous "temper tantrums" at home. A simple form of relaxation was tried and from that day, reports mother, the "tantrums" have ceased. Pauline is still very shy, but some work has been started on correction of faulty speech sounds and she is steadily becoming more adjusted.

Sandra—aged twelve years—was sent to us from a secondary modern school, as she was not speaking to teachers or other girls, and was generally withdrawn. Her speech had many faulty sounds and as work continued, her teacher kindly helping with daily practice, she became gradually more adjusted and is now quite an average member of her class.

Statistics

	1956
No. of cases in attendance 1st January	50
No. of cases in attendance 31st December	53
No. of new cases	152
No. of cases discharged	149
Total No. of attendances during year	2,372
Total No. of children attending	202

Northern Area

Rosemary Morris

During 1956 work in the Northern Area of the City has continued steadily throughout the year. Clinics have been held at Portway Clinic and Southmead Clinic and there have been good attendances. For one term, Russell Town Special School for E.S.N. boys was visited for a half day each week, because a number of boys were found in need of speech therapy. Although progress is obviously slower with these children, it has been found to be beneficial and therefore worthwhile. The Headmaster and staff gave every help and consideration and were always most co-operative. It is, I think, a pity that more time cannot be given to backward children, but children from normal schools have to be given priority. However, some of the boys from Russell Town are now continuing their treatment at the Argyle Road Speech Clinic.

Various visitors have been to the Clinic to watch treatment sessions and all have been interested to see something of the sort of work that is done here. Among the visitors have been student health nurses, to whom a preliminary talk about speech therapy was given.

Work has been fairly evenly distributed between stammerers and speech defectives. With the young children, the facilities for play at the Argyle Road Clinic have been most beneficial particularly with young stammerers who lack confidence and whose home life is often somewhat restricted.

It is often found that after a course of intensive treatment over a period of some months, some children require time to assimilate what they have learned and these are given a break from attending the clinic. On returning for a check-up, the child's speech has frequently much improved.

Some interesting Cases

D.R.—This boy was referred to the clinic by his headmaster because of a stammer that was handicapping his work at school. This boy would not speak at all in class if he could avoid it and was always very shy. His mother reported that when he went shopping for her, she always had to write down what she wanted, as he would never ask for anything in a shop. The boy's teacher was sure that he was an intelligent child, but his work did not do him justice. After attending the clinic for some while, the boy gained confidence so that he was no longer afraid to speak and became much less shy. At the end of the following term, he won the progress prize at school. Although his stammer has not gone completely, the fact that his confidence and work have improved is most satisfactory.

J.I., aged 4½ years.—This little boy also stammered but the problem lay not with the child, but with his mother. She herself had a severe stammer which she had had since childhood. Her parents had made several attempts to get her speech cured but without any success, the reason for which I thought rather interesting—she told me that it paid her to stammer, because as soon as she began, the family would always give her what she wanted, thus she found it an asset rather than a handicap. However, she was worried about her child as “it is so much worse for a boy to stammer”—why, I am not quite sure! The little boy came for a few weeks and although when he was in the clinic his speech became almost normal, he continued, naturally enough, to stammer with his mother. The only satisfactory solution, I felt, was for the mother to have treatment for her own stammer, and this she said she would do. What the outcome was, however, I shall probably never know as unfortunately they left the district.

M.H., aged 13 years. This case illustrates what a difference it makes when a child really wants to improve her speech. This girl had a marked lateral sigmatism about which she had become self-conscious, and she was anxious to speak normally. After four visits to the clinic, her "s" was perfect and she was using it correctly all the time.

Statistics

No. commencing treatment during the year	..	..	..	90
No. discharged	..	..	..	71
No. in attendance at the end of the year	..	..	..	41
No. of cases "resting"	..	..	..	41
No. transferred to Child Guidance Clinic	..	..	..	1
No. transferred to lip reading	..	..	..	1
No. of attendances during the year	..	..	..	1,496
No. treated during the year	..	..	..	155

Speech Therapy at Claremont School for Spastic Children

Beryl Bolwell

In September of this year a long-felt need was filled when the speech therapy service at Claremont School for Spastics was increased to a full-time appointment.

This has meant, that not only do the children attending the school receive more continuous treatment, but that the speech therapist is able to devote time to other aspects of therapy. One of the most important of these is the training of those children who have severe swallowing and feeding difficulties as a result of their cerebral palsy, for, if the child is unable to chew, suck or swallow normally, he will need help in the acquisition of these basic functions of tongue, lips and palate before control of these organs for speech can be hoped for.

Another group of patients to which much attention has been given are those who have the additional handicap of deafness. Whilst some progress has been made in auditory training, with consequent speech improvement, with the children who have a less severe hearing loss, the speech therapist is unable to give the necessary concentrated training to the severely handicapped group. The assistance of the Headmistress and staff of Elmfield School for Deaf Children has been enlisted and visits have been paid by them to the school. This has proved most helpful, but it is felt most strongly that regular help and guidance is needed in the training and general handling of these children, particularly as it would appear that they are likely to remain at this school for some considerable time. It is also probable that within the next twelve months two other children suspected of suffering from a hearing loss will be admitted to the school. It will be seen, then, that this problem will be of long duration. So far as is known this problem in the school for cerebral palsied children seems to be unique in the country, and it indicates the need for some specialised time to be given to the children by a teacher of the deaf. It is hoped that it will be possible to provide this in the reasonably near future.

During the year, a tape-recorder has been provided for use at the school and this has proved a valuable piece of equipment, both as a means of recording progress for future reference, and, in certain selected cases, an aid to therapy, whereby the child is able to hear and criticise his own speech.

In January, 1956, sixteen children were receiving treatment. Since that time a further three have been admitted, and two discharged upon transfer to normal school, one has been excluded and now attends Marlborough House Occupation Centre, and one has died. This leaves a total of fifteen children receiving speech therapy on 31st December, 1956. During the year 955 treatments have been given.

In conclusion, I should like to record my appreciation of the assistance I have received from members of the medical, physio-therapy, and teaching staff at Claremont School during the past year. The amount of discussion possible when working in a team of this nature is an important factor in the successful treatment of cerebral-palsied children.

TUBERCULOSIS

Children's Contact Clinic

Mary D. Gibson

During 1956 the procedure in the Children's T.B. Contact Clinic has continued on the lines adopted during 1955 with one important addition, the use of chemotherapy for any child showing clinical or radiological evidence of an active primary tuberculous lesion.

In the 1955 Annual Report it was mentioned that four out of the eight cases of bone tuberculosis admitted to hospital during the year were in children whom we had seen first with a large primary lesion in the lung two or three years previously, had treated at the time only with rest, etc., and had had under observation since.

Dr. R. A. Craig put this finding forward as a subject for discussion at the British Tuberculosis Association meeting which took place in Bristol during the summer of 1956.

The general opinion of the physicians there, who were dealing with child contacts, was that active chemotherapy should be given.

When, owing to the infrequency of tuberculin skin testing in any individual child, it is impossible to know exactly when the child did convert to a positive reactor, if it shows no clinical or radiological evidence of activity when examined, it does not seem to be justified to give treatment. Treatment obviously can only be an effective preventive of future trouble if given during the early presumably haematogenous stage of the infection.

An interesting group of children aged from five to ten years was investigated during the year, as contacts of a teacher suffering from pulmonary tuberculosis. Over a period stretching from six to twelve weeks after the teacher entered sanatorium, all the children in the school were tested using the Heaf method. Eighteen children out of the class of forty nine-year-olds, taught by this teacher, had positive tuberculin skin tests. In four of the eighteen, a possible source of infection existed in the child's family and in three others a possibility existed of an infected neighbour being the source of trouble. In eleven, however, no source of infection other than the teacher could be found.

The other four classes had few positive reactors, the number ranging from one out of forty children in one class to six out of forty in another. The remaining two classes had two positive reactors each.

All these positive reactors have now been followed up for more than six months and fortunately no child has shown any sign of illness. This obviously might not have been the case if the class exposed to risk had

been five-year-olds or adolescents instead of nine-year-olds—an age when natural resistance to tuberculosis seems to be high. This would seem to emphasise once again the desirability of teachers working among children and adolescents, taking advantage of the offer of an annual X-ray check.

During 1956, 112 new children were seen at the Contact Clinic, some of whom paid several visits. The total number of visits paid during the year was 814.

Only three new cases of infectious tuberculosis were found as the result of follow-up of contacts of school entrants with positive tuberculin skin tests out of a total of 676 tested.

The conversion rate among these children, average age six years, was 1.9 per cent. This figure has shown little change in the past three years, the figures being 1.2 per cent in 1955 and 1.8 per cent in 1954. This conversion rate had risen to 13.6 per cent among thirteen year olds tested prior to B.C.G. vaccination under the Ministry scheme. This would seem to be another strong argument in favour of a 100 per cent response among teachers to the offer of an annual X-ray.

Once again, the occasional child, possibly because of a personal hypersensitivity to sticking plaster, has produced a severe reaction at the site of application of a jelly patch. This not only makes interpretation impossible but is very uncomfortable for the child. Two of the Assistant School Medical Officers have now used the Heaf gun method of testing on a large number of children in schools and have encountered no reluctance among parents or children to have this instead of a jelly patch test. It is therefore suggested that the Heaf method should be adopted instead of the jelly patch in future testing of school children.

B.C.G. Vaccination in Thirteen-Year-Old Children

A. M. McFarlan

In 1956 the number of thirteen-year-old children whose parents accepted B.C.G. vaccination was 3,782. This was slightly less than 3,833 in 1955. The number vaccinated was 3,264 which is slightly higher than 3,215 in 1955.

The explanation is that the percentage of children found to be tuberculin positive fell from 16.1 in 1955 (17.2 in 1954) to 13.6 in 1956. The fact that fewer children had already been infected is an additional reason for immunising as many susceptible children as possible so as to protect them during the years when there is a high incidence of new cases of respiratory tuberculosis.

The figures for acceptances and vaccinations since 1954 when the scheme was started are:

			<i>Acceptances</i>	<i>Tuberculin Positive Number</i>	<i>Positive Per Cent.</i>	<i>Vaccinated (Tuberculin Negative)</i>
1954	..	..	988	171	17.2	817
1955	..	..	3,833	618	16.1	3,215
1956	..	..	3,782	518	13.6	3,264

Mass Radiography

E. Evelyn Mawson

The arrangements for the mass radiography of children due to leave school were continued during the year, on the same lines as in previous years, and 4,324 children were X-rayed through the Mass Radiography Service. The details of the cases are given below:

Summary	Boys	Girls	Total
Miniature films	2,264	2,060	4,324
Recalled for large films	52	37	89
Normal large films	34	25	59
Did not attend	—	1	1
Significant cases	15	9	24
Observation cases	3	2	5

Analysis of significant cases

Of the significant cases, 14 were found on clinical examination to have non-tuberculous conditions as set out below.

Condition	Boys	Girls	Total
Bronchiectasis	1	1	2
Abnormality of bony thorax	4	—	4
Cardio-vascular lesion	2	—	2
Pulmonary fibrosis	1	—	1
Bacterial and virus infections of the lungs	1	4	5
TOTAL	9	5	14

The remaining cases were found to have varying degrees of tuberculous conditions as follows:

	Boys	Girls	Total
Active tuberculosis	—	1	1
Inactive	4	2	6
Under observation	2	1	3

X-ray of Teachers

A. L. S.

In Bristol we are fortunate in having facilities at the premises of the Central Health Clinic for carrying out the X-ray examination of teachers. It seems desirable to give an account of our efforts to secure the aim of an annual X-ray examination of all teachers and other staffs coming in contact with children. The method adopted is that a register is kept of teachers and the X-ray apparatus is made available on one session per week. Individual appointments are given, making sure that not more than one teacher is summoned from any one school at one particular session. Some regard is given to the distance the teacher has to travel in arranging the time of appointment. About 30 teachers are summoned at each session, and on these numbers it would seem that there ought to be two sessions each week instead of one. During the year 547 teachers were X-rayed out of 947 summoned at 30 sessions. Seven teachers were recalled to have large films taken for various reasons and the results of these show that 6 had old T.B. conditions non-active and 1 had a non-pulmonary pathological chest state.

There was no case of active T.B. detected this year, but there was one case which came to light through other means. There were 8 teachers who actually refused to be X-rayed, but there was considerably more resistance active or implied to the process. Something of this was expressed by teachers saying that they had been X-rayed recently, which might or might not have had any connection with an X-ray of the chest, or teachers might complain that they had had an X-ray within twelve months, when in fact their last X-ray under the scheme was considerably more than twelve months previously. Or again teachers occasionally are consistently absent without any reason being given. A certain amount of difficulty is experienced by teachers claiming that they had been X-rayed when the school leavers attended for mass X-ray, of which of course, we have no record, unless information is submitted by the teacher. It is difficult to know how to counter this sort of resistance, which is very real, and to many people twelve months appears to be a very short interval of time. It does not help matters also that certain publicity has been given in the national press and otherwise of the evil facts of radiation from X-ray. X-ray examinations of this nature and frequency however would not be recognised as of any consequence from the point of view of radiation hazards. Generally, however, it can be said that teachers as a body have accepted the scheme, and those in whom any symptoms have been found have been most appreciative and have collaborated fully in seeking advice from the chest physician. Occasionally non-pulmonary conditions are discovered, and it seems a little difficult to know what to do in the cases of these coincidental findings. It has been found desirable to ascertain the name of the general practitioner and to communicate the findings to him to take suitable action. In those cases where reference to the consultant chest physician was necessary the Senior Medical Officer for Schools made a personal visit to the teacher to explain the implications.

School Meals Staff

The arrangements for the routine chest X-ray examination of members of the school meals staff were continued during the year and 523 members of the school meals staff were X-rayed. No serious chest conditions were found and in the few cases with minor symptoms appropriate action was taken.

YOUTH EMPLOYMENT DEPARTMENT

The Employment of Handicapped Children

B. M. Dyer

This year was again one of full employment for young people although towards the latter part of the year the situation became more difficult and this meant that boys and girls who were unemployed for any reason found it less easy to obtain other jobs. This was especially noticeable in the case of boys between 16 and 18 and there was some unemployment among the less stable handicapped boys.

The work of the Youth Employment Department continued as before with informal talks in all the Authority's Special Schools about six months before the girls and boys were due to leave, followed by a second visit and individual interviews, the aim being to encourage the youngsters to regard the Youth Employment Officer as a friendly person interested in them and their families. The co-operation of the parents of handicapped young people is vitally important and where this is secured the task of the

Youth Employment Officer is considerably lightened. The mentally and physically handicapped children are very dependent on the Youth Employment Officer for finding work initially when leaving school and on all future occasions if they lose their job.

During the year 25 girls and 33 boys left the Authority's schools for the mentally handicapped and most of these children were placed either under the supervision of the Mental Health Department or the Special Schools' Welfare Officer. In addition 4 boys from special schools for maladjusted children were helped, also 2 boys and 1 girl from the school for the deaf, 2 boys and 7 girls from South Bristol Open Air School, 1 partially sighted boy and 1 girl from a special school for epileptic children.

The Department has received help and co-operation from many social agencies in the City and from many employers as well as from the staff of the Ministry of Labour and National Service. The courses at the Bristol Rehabilitation Unit have been of great assistance. During the year 9 boys and 3 girls attended courses at this Unit.

During the year 17 boys and 9 girls were added to the Register of Disabled Persons and at the end of the year there were 23 girls and 21 boys on this register, all except very few being either in work or undergoing training.

Aftercare of Handicapped Children

L. A. Tavener

In December, 1955, Miss B. A. Roughton was appointed to the post of Special Schools Welfare Officer in the School Welfare Department to deal with the aftercare of handicapped pupils. Since her appointment this work has been constantly under review having in mind its further development not only in the direction of aftercare but also in connection with making contact with those families in which there are handicapped children in need of care at the earliest possible stage so that maximum help may be given. It has become realised increasingly how necessary it is to establish good relationships with the families while handicapped children are at school, so that by the time aftercare is considered, the Special Schools Welfare Officer will have built up a case history which will be invaluable in deciding the kind of aftercare necessary for each child and thus bring aftercare into its proper sequence of events in the child's life. This work has not yet been fully developed and the year's effort has shown that already the case load is far more considerable than permits entirely adequate case work under present conditions.

The variety of problems dealt with is very extensive, most difficulties arising from unsatisfactory home circumstances, often due to parental inability to accept the child's handicap and more often than not to the parents themselves being much below average intelligence and unable to realise the value of co-operation with those who are trying to help.

The kind of problems arising in this work broadly fall into the following categories:

- (a) Cases requiring a large number of visits at irregular intervals, bringing outside assistance as necessary from time to time.
- (b) Those cases requiring frequent regular visits which often have to be made either during the dinner hour or in the evening and these are in the majority.

- (c) Cases requiring less frequent visits, perhaps bi-weekly or even tri-weekly where the real difficulties are not so much with the children themselves, but rather with the parents and in this kind of case the surest way of helping the child has been to deal with the parental problems.
- (d) Check visits are made in those cases which are normally being covered by some other agency.
- (e) Cases which are being dealt with completely by other agencies, for example the Probation Officers, are visited personally only if requested to do so by the Probation Officer concerned.
- (f) Visits to deal with problems arising in the special schools as information is received direct from the heads of schools.
- (g) To assist with the problems arising from Juvenile Courts.
- (h) Visits to see young persons who have themselves got in touch with the Special Schools Welfare Officer for advice and help in personal matters.
- (i) Frequently the most difficult problems to be dealt with are those concerned with health, particularly enuresis and petit mal.

Further development of this work has been undertaken in fostering close relationships with other services, particularly the Youth Employment Service, the Probation Department and Children's Officer so as to provide for a minimum number of persons visiting any one household, thus preserving the family relationship which any particular officer may have developed and at the same time ensuring that the maximum information is made available to the field workers concerned. Other valuable contacts are maintained with the Medical Service, Child Guidance Clinic, Mental Health Authority and the Social Science Department of the University of Bristol. The voluntary work in connection with the James Wycombe Youth Club has been maintained and it is hoped that an extension of this work may be possible in the near future. Close contact is maintained with the Corner Cottage Settlement, Knowle West, from whom considerable help has been received.

The homes of special school leavers and leavers from special classes in other schools are visited during the child's last term at school and a report on each child is prepared for the Leavers' Conference. In the spring of 1956 23 homes were visited and subsequently 16 of these leavers were placed under voluntary supervision. In the summer term 31 homes were visited and 14 were placed under voluntary supervision. In the autumn term the health visitors carried out 40 preliminary visits and 15 leavers were placed under voluntary supervision.

The year's work has confirmed that one officer cannot deal adequately with this vast problem and adjustments have already been made to provide the Special Schools Welfare Officer with some assistance by way of help given by a woman School Welfare Officer.

BRISTOL EDUCATION COMMITTEE*Chairman* - - Alderman R. ST. JOHN READE, O.B.E., M.A.*Vice-Chairman* - Alderman Mrs. F. M. BROWN**Special Services Committee***Chairman* - Alderman Mrs. F. M. BROWN

Chief Education Officer

G. H. SYLVESTER, M.A.

Principal School Medical Officer and Medical Officer of Health

R. C. WOFINDEN, M.D., D.P.H., D.P.A.

**Deputy Principal School Medical Officer and
Deputy Medical Officer of Health**

P. G. ROADS, M.D., D.P.H.

Senior Medical Officer, School Health Service

A. L. SMALLWOOD, MD., D.C.H., D.P.H.

CITY AND COUNTY OF BRISTOL

Population (estimated mid-1956)	440,500
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Schools:—

Number of School Departments	220
Average Number on Registers	65,979
Average Attendance..	..	..	..	..	..	..	59 665

STAFF

Principal School Medical Officer and Medical Officer of Health

R. C. WOFINDEN, M.D., D.P.H., D.P.A.

Deputy Principal School Medical Officer and Deputy Medical Officer of Health

P. G. ROADS, M.D., D.P.H.

Senior Medical Officer School Health Service

A. L. SMALLWOOD, M.D., D.C.H., D.P.H.

School Medical Officers

(Joint Appointments with the Local Health Authority)

Mrs. Monica A. Pauli, M.B., Ch.B., B.A.O.

R. J. Irving Bell, M.R.C.S., L.R.C.P., D.P.H.

Mary Gibson, M.B., Ch.B., D.P.H.

A. M. Fraser, L.R.C.P., L.R.C.S., D.P.H.

B. J. Boulton, M.B., Ch.B.

Clara Jahoda, M.D. (Vienna)

Helen M. Gibb, M.B., Ch.B., D.P.H.

J. E. Kaye, Med. Dip. (Warsaw), D.P.H.

S. W. Terry, M.B., B.S., D.T.M. & H., D.P.H.

J. L. S. James, M.R.C.S., L.R.C.P. (Anaesthetist)

Kathleen E. Faulkner, M.B., Ch.B., D.C.H., D.P.H.

D. J. Sheerboom, M.B., B.S.

Mrs. Marjorie Mair, B.Sc., M.B., Ch. B. (from 1/2/56)

H. W. S. Francis, M.A., M.B., B.Chir., D.P.H. (from 7/8/56)

E. Rogan, L.L.M.R.C.P. (I), L.L.M.R.C.S. (I), D.P.H. (from 1/7/56)

Part-time School Medical Officers

H. F. M. Finzel, M.D., B.S.,

C. Jean Fraser, M.B., Ch.B., D.P.H.

Consultants—Part-time

Ear, Nose and Throat	..	G. R. Scarff, M.B., Ch.B., F.R.C.S. (E.) (to 30/9/56)
		H. D. Fairman, F.R.C.S.
		J. Freeman, F.R.C.S., D.L.O. (from 1/10/56)
Orthopaedic	.. ..	K. H. Pridie, M.B., B.S., F.R.C.S.*
		D. M. Jones, M.B., B.S., M.Ch. (Orth.), F.R.C.S.*
		H. Keith Lucas, M.Ch. (Orth.), F.R.C.S.
Ophthalmic	.. ..	R. R. Garden, M.A., M.B., D.O.M.S., D.P.H.
		R. L. M. Stewart, M.B., Ch.B.*
Cardio-rheumatic	.. ..	C. Bruce Perry, M.D., F.R.C.P.
		(by arrangement with United Bristol Hospitals)
Dermatology	.. ..	R. P. Warin, M.D., M.R.C.P.*
		C. D. Evans, B.A., M.B., B.Ch. (Camb.)*
Chiropody	.. ..	L. I. W. Tasker, M.Ch.S.

Dental Surgeons

(Joint Appointments with the Local Health Authority)

Principal School Dental Officer	..	W. H. B. Stride, L.D.S.
School Dental Officers	.. ..	A. H. V. Williams, L.D.S. H. W. Williams, L.D.S. Alice M. Trump, L.D.S. Helena Blinkworth, L.D.S. J. F. Sellin, L.D.S. J. G. James, B.D.S. (to commence 7/1/57) R. D. Hepburn, L.D.S. W. E. C. Chaplin, L.D.S. (to commence 1/1/57) G. D. Everard, L.D.S. (from 17/9/56) Elizabeth R. Shinkwen, B.D.S. (to commence 12/1/57)
Oral Hygienist	.. ..	H. Hazell, L.D.S. (part-time)* Jean E. Wells

Child Guidance Clinic

Director	.. ..	R. F. Barbour, M.A., F.R.C.P., D.P.M.
Consultant Psychiatrist	.. ..	W. L. Walker, M.B., Ch.B., D.P.H., D.P.M.*
Psychiatric Registrar	.. ..	J. F. Warner, M.B., Ch.B.*
Assistant Psychiatrist	.. ..	Mrs. Doris E. Heron, M.R.C.S., L.R.C.P.
Senior Psychologist	.. ..	R. V. Saunders, M.A., B.Ed.
Senior Assistant Psychologist	.. ..	K. Harrison, Ph.D. (from 1/2/57) C. J. Beedell, B.Sc. (full time to 31/10/56) (from 1/11/56 part-time by arrangement with University of Bristol)
Psychologists	.. ..	Eleanor J. Horn, M.A., Dip. Ed. Margaret O'Flynn, B.A.
Senior Psychiatric Social Worker	.. ..	Mrs. L. Gatliff
Psychiatric Social Workers	.. ..	Berry Harrison Margaret Astley (part-time)

Speech Clinic

Speech Therapists	Kathleen Coleman, L.C.S.T. Beryl Bolwell, L.C.S.T. Rosemary Morris, L.C.S.T.
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Nursing Service

Chief Nursing Officer	Miss L. M. Bendall, S.R.N., S.C.M., H.V. Cert.
Deputy Chief Nursing Officer	Miss V. P. Bowler, S.R.N., S.C.M., H.V. Cert.

* By arrangement with the Regional Hospital Board

The following staff changes took place during the year:

Medical

The following appointments were made to the joint medical staff of the Local Health and Education Authorities during the year:

Mrs. Marjorie Mair, B.Sc., M.B., Ch.B. (from 1.2.1956).

B. Rogan, L.L.M.R.C.P.(I.), L.L.M.R.C.S.(I.), D.P.H. (from 1.7.1956).

H. W. S. Francis, M.A., M.B., B.Chir., D.P.H. (from 7.8.1956).

Dental

The following appointments were made to the joint dental staff during the year:

G. D. Everard, L.D.S. (from 17.9.1956).

W. E. C. Chaplin, L.D.S. (to commence 1.1.1957).

J. G. James, B.D.S. (to commence 7.1.1957).

Elizabeth R. Shinkwen, B.D.S. (to commence 12.1.1957).

Child Guidance

Dr. James Warner, M.B., Ch.B., Registrar in Psychiatry appointed by the Regional Hospital Board, joined the staff on 1st October, 1956, giving five sessions a week at the clinic. Mr. C. J. Beedell resigned his appointment as Senior Assistant Educational Psychologist on 31st October, 1956, to take up a research fellowship at Bristol University. He has, however, by permission of the University, continued to give two sessions a week at the clinic since resigning his appointment. Dr. K. Harrison, Ph.D., was appointed in his place but up to the end of the year had not taken up duty.

Persons other than those whose names appear in the list of staff who have contributed to this report are the following:

L. A. Tavener, *Superintendent Welfare Officer*

Miss E. E. Mawson, M.D., *Medical Officer-in-Charge, Mass Radiography Unit*

Miss T. B. Hetherington, *Chief Organiser of School Meals*

F. J. Redstone, F.R.S.H., F.S.P.H.A., *Chief Public Health Inspector*

J. MacA. Milne, *Chief Organiser of Physical Education*

Miss C. E. Cooke, *Senior Woman Organiser of Physical Education*

C. Williams, *Head of South Bristol Open Air School*

B. M. Dyer, M.B.E., B.A., *Youth Employment Officer*

Mrs. Grace Woods, M.D., D.C.H., D.P.H., *Medical Officer, Cerebral Palsy Assessment Clinic and Claremont School for Spastic Children*

Miss M. Sharwood, *Head of Elmfield School for the Deaf*

Miss R. H. Sturman, *Visiting Teacher for Partially Deaf Children*

Miss M. J. Ram, B.A., *Head of Claremont School for Spastic Children*

Miss M. Chapman, *Nutritionist, Public Health Department*

Miss M. E. Eattell, *Head of Frenchay Hospital School*

Miss M. Davies, B.A., *Head Croydon Hall Special School for E.S.N. Girls*

SCHOOL CLINICS

<i>Name of Clinic</i>	<i>Address</i>	<i>Clinics Held</i>
Central Health Clinic	Tower Hill, Bristol 2. Tel. 2-6602.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment. Ophthalmic, Orthopaedic, Aural and Dermatological Consultant Clinics, Chiropody Clinic, Enuretic Clinic, Artificial Sunlight Clinic, Tb Contact Clinic, Children's Chest Clinic.
Charlotte Keel Clinic.	Claremont Street, Stapleton Road. Tel. 5-1545.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment.
Bedminster Health Clinic.	Wedmore Vale, Bristol 3. Tel. 6-3798.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment. Ophthalmic and Aural Consultant Clinics.
Granby House Clinic.	St. John's Road, Bedminster Tel. 6-4443.	Minor Ailment Inspection and Treatment.
Speedwell Health Clinic	Whitefield Road, Speedwell, Bristol 5. Tel. 67-3194.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment. Ophthalmic and Aural Consultant Clinics.
Portway Health Clinic	Shirehampton, Bristol. Tel. Avonm'th 2900.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment. Ophthalmic and Aural Consultant Clinics.
Southmead Health Clinic	Monks Park Ave., Southmead, Bristol. Tel. 62-6414.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment. Ophthalmic and Aural Consultant Clinics.
Brooklea Clinic	Wick Road, Brislington. Tel. 7-8861.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment.
Knowle Health Clinic	Broadfield Road, Bristol 4. Tel. 7-6292.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment.
Lawrence Weston Clinic	Ridingleaze, Lawrence Weston. Tel. Avonm'th 3205.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment.
William Budd Health Centre	Leinster Ave., Bristol 4. Tel. 6-1112.	Minor Ailment Inspection and Treatment.
Mary Hennessey Clinic	Hareclive Road, Hartcliffe, Bristol 3. Tel. 6-4282.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment.
John Milton Clinic	Crow Lane, Brentry, Bristol. Tel. 62-2160.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment.
Connaught Road School Clinic	Connaught Road School, Bristol 4.	Minor Ailment Treatment.
Verrier Road Clinic	Verrier Road, Redfield. Tel. 5-6387.	Minor Ailment Treatment.
Child Guidance Clinic	7 Brunswick Square, Bristol 2. Tel. 2-6181.	
Speech Clinics	1, Argyle Road, St. Paul's, Bristol 2. Tel. 2-6760 and Knowle Heath Clinic.	

APPENDIX A

Life in a Residential Special School

M. Davies

Life in a residential special school can have a particular character of its own. This particular school for senior E.S.N. girls is rather isolated, being three miles from the main road in hilly country near Minehead. A regular visit is made once a week on Saturdays to the town in a mass excursion, but at other times only in moments of crisis.

One feature of this school differs from our other schools and that is it is entirely feminine. Other schools may have a headmaster and matron who are often husband and wife, but in this particular girls' school the head and the staff must combine the functions of mother and father substitute for the girls. In a girls' school emotions tend to run rather high. Boys may get this out of their system by doing things and making things or rushing about at their games in a way that girls seem unable to do. The following incidents are true to life and reflect something of the life of this fairly isolated community of educationally sub-normal girls.

The Poisoners

On one occasion a girl ate some ivy berries for which she was treated at Minehead Hospital. Shortly afterwards the girl again appeared in hospital, and the following telephone conversation ensued.

"Hello. This is Croydon Hall . . . Minehead Hospital? . . . Yes . . . this is the headmistress. Whom did you say? . . . the girl from whom you removed forty ivy berries on Wednesday? . . . poisoned again? . . . I can't believe it . . . you say she is stiff all over? . . . You have injected for tetany? Yes . . . of course . . . I will come at once."

Taxi as quickly as possible—twenty minutes to Minehead—grave-faced sister.

"She is in there. She is very, very ill."

And there she was like Tennyson's Alice. Her hands on the counterpane. Her impish face still. Suddenly her eyes opened.

"Oh, Miss . . . I'm awfully ill. I'm all stiff. I came over like that. The doctor he stuck a needle in me. He says I may have to stay two years, or two months!"

"I hope it will be two years. It'll save me an awful lot of trouble."

"Aw, Miss."

"Elsie, couldn't the doctor help you?"

"No, Miss. He tried hard enough to make me move me hands, but of course, I couldn't do it."

"Of course not. What did he try to make you do?"

Up she sat, face alive, full of mimicry, all in action. Eyes, hands, fingers, all dancing, and she laughed. "He tried to make me do all this, and this, and this . . . but I can't do it, you see I'm too stiff."

She was back at school within the shortest time, and entertaining all with tales of her horrible sufferings.

About three years passed and a number of girls for no reason ate some leaves from plants in the garden. Castor oil was at once administered but the girls feared the worst. A mock telephone call to the general practitioner elicited advice that they should lie flat on a convenient floor, sip castor oil, mustard and pepper every five minutes, and have their tummies ironed as often as they could stand it. "I hope you have said your prayers," said our sempstress, and a babel of prayer broke out.

"Oh, God," said June. "Please don't let my best friend Jessie die. It don't matter about me."

The handyman looked in. "I just looked in to see how they maidens was getting on. . . . Oh, deary me, they looks awful bad . . . I think I'd best slip down and tell me old gal that I'll be needed up here tonight making coffins!"

The hours crept on, urged to breathe, the sinners persevered, and so next morning awoke to a miraculous preservation. "Oh, Miss, I'm *alive*." The cry of rejoicing echoed round the waking house. "Oh, Miss, I'll never do it again, and I'll see no one else don't" . . . and they didn't.

Escapes and hurried journeys

Some children have a flair for escaping—it doesn't matter where or how. At first with us escapes were popular, but a fat headmistress who could not run and had to rely on the police made things rather too serious. The fires burned low and only occasionally now do the wings of the dove attract them.

Angela and Maureen and Maggie were among the funniest. They departed one lovely summer day but returned at nightfall humbler and wiser. They came from Plymouth, Bristol and Birmingham respectively, and after all to which haven should they run? To come home was the easiest, so they came.

Rosie woke the school in departing, and only reached the front porch. She had all her library and her toothbrush. She couldn't read a word, and never cleaned her teeth. What wild desire urged her to take her toothbrush we never knew.

Jean took brown shoe polish to darken her face and a rope to lasso a horse and to ride home to Wiltshire. The horse, however, would have none of it, and as the roads were hard, Jean compromised by calling for tea at a neighbour's. Only one girl ever returned unrepentant.

The sin of greed

Not a specifically E.S.N. one, anyway, but listed by the Church among the seven deadly ones, and so to be expected anywhere. We find it comes in cycles and we deal with it as it comes.

Vaseline tarts decorated with aloes, fudge made of curry powder, peppermint creams concealing a cascara, chocolate creams filled with horse radish all play their part as deterrents.

The worst sinners are plainly revealed and the wave of crime subsides, until next time.

Homes

Dolly's father was dying and wanted to see her. Could she come? Yes, in two hours.

It was a dark, cold night and we raced through the shadows. "Don't think I'm bothering about me Dad, Miss. He ain't worth it. He ain't a good husband, nor a good father neither. It's me mother I'm worried about. She had a good husband once—didn't let her know what work was! But this one's different. Takes the knife to her! Yes, really he do, Miss. He's what you calls an unthankful husband. He ain't even thankful for his wife and children."

He was too ill to be thankful for anything when we reached his bedside and Dolly stood stiff and merciless beside him. "I'll stay," she said, "but just one night." He cried next day when the time came to go and she kneeled on his bed and spoke like a wise old person.

"You've got to understand, Daddy. You must let me go back. You *want* me to be clever—I can't be clever if I don't go to school. I *must* go back, Daddy."

Irene is fourteen and a half years of age. "My mother, Miss, has six children and they've all got different fathers. She ain't married to the one she's living with now. She says it don't matter, there's lots like it. Oh, Miss, I wants to be different. I wants to live respectable."

The religious aspect

We take our pick of churches—Roman Catholic, Anglican, Baptist. If you aren't any of these you go to our own Chapel, nominally Methodist. A small white and brown building half a mile away, oak pulpit, blue velvet falls, blue flowers and Margaret Tarrant's lovely "Suffer the Children" over the pulpit. It is our chapel. We read the lessons, we play the music, on recorders with our matron; we sing the solos and we follow Sunday by Sunday a continuous Bible story. It is quite obvious that the stories are news to most of the hearers.

The matron found Dolly crying over her testament. "Oh, Miss," she wept, "I can't bear it. How could they do it to Him? He was so good to everyone."

Our Christmas play is called "Coming Home," and at the end, all the cast of shepherds, kings, soldiers, beggars, children and peasants come up to do obeisance. Should you stand within the curtain and watch the bowed faces, you would see no smile.

"Oh, Miss, I do want to be good. I tries and I tries—do you think if I got confirmed it would help?"

These are some of the more dramatic moments in the life of a residential E.S.N. girls' school. The girls are there usually not only because of educational sub-normality but also because of defective home care. It is a tribute to the work of the school that so many leave at sixteen years of age and thereafter lead useful and self-supporting lives.

APPENDIX B

Survey of Ear Defects in Bristol School Leavers 1955/56

E. Rogan

This survey was carried out in Bristol during the twelve months ending July, 1956. It was confined to secondary modern school children who were due to leave school at Christmas, 1955; Easter and July, 1956.

The aim of the survey was to assess the incidence of ear defects in school children; the children were not selected but were examined as part of the periodic school leavers' medical examination. The children were not questioned about previous ear trouble; the survey was purely objective in that only signs of past or present ear disease were recorded. Because of the great number of boys and girls examined with ear drums obscured by wax it was decided to record this feature and assess the incidence.

During the period covered by the survey, 3,494 boys and girls left Bristol secondary modern schools and of these 3,199 were examined for the purposes of the survey. The numbers of boys and girls examined proved to be almost equal, there being 1,598 boys and 1,601 girls, and they were grouped according to intelligence and social class. Grouping by intelligence was straightforward, there being five grades A to E. The social class distribution, however, was at times difficult to ascertain and in this survey the children were placed into one of eight social groups according to the father's occupation.

- Groups I to V coincide with the Registrar-General's classification.
- Group VI referred to widows and pensioners not otherwise classified.
- Group VII consisted of the R—G social classes III, IV and V when there was insufficient evidence to classify accurately.
- Group VIII included all those children who were unable to offer accurate information and where classification of any kind was impossible.

Table I—Social Groups

	I	II	III	IV	V	VI	VII	VIII	Total
No. of boys in each social class	3	71	799	126	136	114	113	236	1598
Percentage of Total ..	0.2	4.4	50.0	7.9	8.5	7.1	7.1	14.8	100.0
No. of girls in each social class	6	77	789	109	137	97	113	273	1601
Percentage of Total ..	0.4	4.8	49.3	6.8	8.6	6.1	7.1	17.1	100.2
R-G percentage distribution of occupied and retired males Bristol 1951 ..	3.1	13.9	55.4	12.1	15.5	—	—	—	—

In Table 1 the social class distribution of the boys and girls examined is shown. This is compared with the social class distribution of occupied and retired males over fifteen years of age in Bristol as published by the Registrar-General in his Census Report 1951 which is the most recent standard available. It can be seen instantly that the number of boys and girls in Groups VI, VII and VIII disrupt the social class picture. Some 29 per cent of the total number of boys and 30.3 per cent of girls fall into these groups, and as a consequence there must be some doubt on the validity of other figures obtained in relation to social class distribution.

It is possible that the reason for such a high percentage of the total examined being in the Groups mentioned is that in Bristol only 25 per cent of mothers attend the examination of school leavers. It would appear then that of the many children medically examined in the absence of their mothers, a considerable number are completely unaware of their father's occupation. From past experience this is probably not surprising in view of the fact that many wives, even, do not know in detail the occupation followed by their husbands.

Table 2

<i>Intelligence</i>	Boys		Girls	
	No. in each group	% in each group	No. in each group	% in each group
A	61	3.8	101	6.3
B	401	25.1	480	30.0
C	667	41.7	485	30.3
D	254	15.9	191	11.9
E	22	1.4	16	1.0
Not stated ..	193	12.1	328	20.5
TOTAL ..	1598	100.0	1601	100.0

The intelligence of each child was assessed by the class teacher. In some instances it is suspected that the intelligence rating was according to the class "stream" rather than an individual assessment. Table 2 demonstrates the frequency distribution in the five grades. Unfortunately 193 boys and 328 girls (12.1 per cent and 20.5 per cent of the total number of boys and girls examined) had no intelligence assessment recorded and these numbers are large enough to cast doubt on the classification in the actual grades.

It is worth while noting the difference in the percentage distribution of boys and girls in each grade. For Grade A there are 3.8 per cent of boys but 6.3 per cent girls, and for Grade C 41.7 per cent of boys but only 30.3 per cent of girls. As so often happens it would appear that teachers gave girls a higher intellectual appraisal on social grounds than for boys; very often teachers are found to tolerate girls of low intelligence when they insist that boys of similar intelligence and sometimes even higher must attend a special school. This effect is seen by the numbers of boys and girls attending special schools for educationally sub-normal pupils—140 boys to 100 girls in Bristol.

General Comment

The School Medical Officers conducting the survey were instructed to record the presence or absence of the following signs in each ear: perforation, scar, discharge, hearing loss, or the ear drum being obscured by wax.

The commonest condition occurring was that of the ear drums being obscured by wax, which occurred in more than a quarter of the total number of children examined. Grouping together all the other defects it was found that about one child in fifteen had a defect in one or both ears.

The hearing loss was in most cases due to previous middle ear disease, and in only two girls was it due to wax in both ears.

Results

Ears obscured by wax

Of the 1,598 boys examined, 391 (24.4 per cent) presented with wax in one or both ears. Out of 1,601 girls there were 488 (30.4 per cent) found with the ear drum obscured in this way. It was a point of interest to see how many ear drums were obscured by wax. It is not usual for wax to be removed during a school medical examination and so as this is a fair sample of school leavers in Bristol it would appear that only 75 per cent of boys and some 70 per cent of girls leave school yearly with the condition of their ear drums being known.

Of the 296 boys the wax was found to be present in both ears in only 138 instances. The right ear was found to be affected in 93 boys and the left ear in 65 boys.

Of 387 girls both ears were obscured by wax in 167 instances, whilst 140 girls were found to have wax in the right ear and 80 girls wax in the left ear.

Table 3

<i>Intelligence</i>	<i>Boys</i>		<i>Girls</i>	
	% boys with wax	% total boys	% girls with wax	% total girls
A	3.0	3.8	6.2	6.3
B	23.0	25.1	29.7	30.0
C	46.3	41.7	29.2	30.3
D	16.9	15.9	13.2	11.9
E	1.4	1.4	0.8	1.0
Not stated	9.5	12.1	20.9	20.5

The intelligence assessments of children with wax are very similar to those of the total number of children examined. This can be seen in Table 3, and no significant difference was demonstrated. It must be borne in mind, however, that 9.5 per cent of boys and 20.9 per cent of girls did not have an intelligence assessment.

In 1955 medical inspections of boys attending Bristol Grammar School were carried out on 403 boys aged 8 to 15 years. The medical examinations were carried out by some of the same School Medical Officers who carried out the present survey. It was found then that only

24 boys out of 403 had wax obscuring the right ear drum whilst 18 boys had wax in the left ear. Unfortunately how many boys, if any, had wax in both ears is not known, but even if it is assumed that wax occurred in one ear only then there were 42 boys or only 10.4 per cent with wax in the ears.

It must be pointed out that of the 403 boys all were probably assessed as A intelligence. Some 71 boys had fathers in social class I, and 148 boys had fathers in social class II, so the sample is heavily weighted both by intelligence and social class grading.

The difference found, that 24.4 per cent of boys attending secondary modern schools and 10.4 per cent of boys attending Bristol Grammar School have wax in the ears, is inexplicable. Is it that mothers in the upper social classes clean the ears of their children more diligently (or the boys themselves do so), or is it that there is less wax in boys of high intelligence and high social standing.

Table 4—Percentage incidence of boys and girls with one or both ears obscured by wax according to social class grouping compared with the social class distribution of all boys and girls examined.

Social Class				% Total boys	% Boys with wax	% Total girls	% Girls with wax
I	..	..	..	0.2	0.7	0.4	0.3
II	..	..	..	4.4	5.1	4.8	3.1
III	..	..	..	50.0	50.0	49.3	46.5
IV	..	..	..	7.9	8.4	6.8	8.5
V	..	..	..	8.5	10.1	8.6	10.6
VI	..	..	..	7.1	7.4	6.1	8.5
VII	..	..	..	7.1	10.8	7.1	12.1
VIII	..	..	..	14.8	7.4	17.1	10.3
Totals	..	..	..	100.0	99.9	100.2	99.9

It was a point of interest to see whether any social class differences occurred in children with wax in the ears. The frequency distribution of these children is compared with the total number of children examined in Table 4. No definite trend was observed. It must be remembered, however, that the large number of children falling into groups VII and VIII have made any such comparison difficult.

Of the 683 children with wax in the ears there were 8 boys and 22 girls where the wax only partially obscured the drum and other defects were noted. Signs of past or present *otitis media* occurred in one or both ears, and in only two girls was wax in both ears associated with bilateral deafness. It is a matter for speculation how many boys or girls presenting with wax obscuring the drum have defects of the drum which are sequelae of previous ear disease. Whilst wax is not removed at school medical examinations it is often done at National Service Medical Boards, and part of the difference noted in ear defects in school leavers and National Servicemen on entry may well be because of this fact.

Ear Defects other than Wax

Of the 3,199 children examined, there were 103 boys (6.4 per cent of the total number of boys) and 123 girls (7.7 per cent of the total number of girls) with one or more defects other than wax, i.e. perforation, scar, discharge and hearing loss in one or both ears.

Table 5

Defect	Boys		Girls	
	R. ear	L. ear	R. ear	L. ear
Perforation ..	32	21	25	33
Scar	34	26	45	37
Discharge	10	8	8	10
Hearing Loss ..	18	14	24	17

In Table 5 the list of the defects can be seen for each ear in both boys and girls.

The boys and girls with defects were taken as two groups and were compared by intelligence and social class with the total number of boys and girls examined. It was thought that some intelligence or social class difference might show itself.

Table 6

Intelligence	% boys with defect	% Total boys
A	4.9	3.8
B	25.2	25.1
C	36.9	41.7
D	21.4	15.9
E	3.9	1.4
N.S. ..	7.8	12.1

Table 6 shows the percentage distribution of boys with defects compared with the total number of boys examined by the intelligence assessment. There is a considerable difference especially in the C. D. E. and "not stated" grades. A χ^2 test however gave $\chi^2=7.23$ with a probability between 5 and 10 per cent which could not be regarded as significant.

Table 7

Intelligence	% girls with defect	% Total girls
A	5.7	6.3
B	30.9	30.0
C	33.3	30.3
D	10.6	11.9
E	1.6	1.0
N.S. ..	17.9	20.5

There was no appreciable difference in the intelligence of girls with an ear defect and of the total number of girls. The percentage frequency distributions can be seen to be similar in this table.

It had been expected that more children of lower social class parents would show ear defects than children better placed from the socio-economic standpoint. There was no evidence that this was so and comparison of the percentage distribution of boys and girls with defect and of the total number of boys and girls examined by social class are again similar.

Social Class

Table 8—The social class distribution by percentage of boys and girls with ear defects compared with the total number of boys and girls

Social Class	Boys		Girls	
	% Distribution Total boys	% Boys with defect	% Distribution Total girls	% Girls with defect
I	0.2	0.0	0.4	0.8
II	4.4	3.9	4.8	5.7
III	50.0	47.6	49.3	49.6
IV	7.9	16.5	6.8	4.9
V	8.5	9.7	8.6	12.2
VI	7.1	5.8	6.1	7.3
VII	7.1	16.5	7.1	20.3
VIII	14.8	—	17.1	—

In considering intelligence and social class together there is no obvious correlation between the two in children with defects.

It should be noted however that of the children with defects 22.3 per cent of the boys and 27.6 per cent of the girls fall in social classes VI, VII and VIII and the very fact of this alone makes it difficult to draw conclusions of any value. It is proposed to consider the ear defects more closely and this can be done by dividing the defects into three main groups.

1. *Bilateral Ear Defects*

Table 9—Distribution of boys and girls with bilateral ear defects according to intelligence

Intelligence	No. of Boys	No. of Girls
A	1	2
B	8	10
C	7	12
D	3	6
E	1	—
N.S. ..	2	4
Total ..	22	34

Table 10—Distribution of boys and girls with bilateral ear defects by social class

Social Class	No. of Boys	No. of Girls
I	—	1
II	—	1
III	14	16
IV	5	1
V	2	6
VI	—	1
VII	1	5
VIII	—	3
Total ..	22	34

In the 103 boys and 123 girls who presented with defects there were 22 boys and 34 girls who had one or more defects in both ears. The frequency distribution of these boys and girls can be seen in Tables 9 and 10. The numbers are too small to draw any satisfying conclusions but there is no evidence that intelligence and social class are correlated with bilateral ear defects in any way.

There was a marked tendency for the same defect to occur in each ear—bilateral scars and then perforations being the commonest occurring.

2. *Ear Defects in One Ear, the other being normal*

A total of 73 boys had one or more defects in one ear. Of this group 31 (42.5 per cent) had a scar only and 24 boys (32.9 per cent) a perforation only.

There were 67 girls with defects in one ear and 35 (52.2 per cent) had a scar and 20 (29.9 per cent) a perforation only.

An interesting finding was that of the total 73 boys, 46 had a defect in the right ear and 27 in the left ear; whilst of the 67 girls, 26 had a defect in the right ear as against 29 in the left ear. Why there should be such a difference between right and left ears for boys and not for girls was not revealed by the survey. It might be a point of interest to follow this up and decide whether this was a chance finding or not.

In an attempt to give some estimate of possible current ear infection the results were analysed further. The presence of a perforation and/or discharge was regarded as evidence of possible current infection, whilst with the presence of a scar only, ear disease was regarded as a past incident and not likely to cause any trouble.

Some 50 boys or 3.12 per cent of the total examined were regarded as "current infection likely" and 40 boys or 2.67 per cent of the total presenting with a scar only were categorised as "current infection unlikely."

With regard to girls, there were 50 or 3.12 per cent of the total examined who were regarded as "current infection likely," and 48 or 2.99 per cent of the total were placed as "current infection unlikely." The figures for both sexes are remarkably similar.

3. *Hearing Loss*

The standard used was the inability to hear a forced whisper at 10 feet; this of course was done as part of the medical inspection in the unsatisfactory conditions of secondary modern schools where the School Medical Officer had to compete with much extraneous noise.

Altogether 23 boys (1.4 per cent of the total number of boys examined) and 31 girls (1.9 per cent of the total number of girls examined) were found by the standard used to be deaf. Of these children 9 boys and 10 girls were deaf in both ears. In the cases of one boy and one girl both deaf in each ear no apparent cause was found to account for their deafness. There is no previous record of hearing disability in the respective 10 M forms and they both seem to have got on well at school. In each case the general practitioner has been notified for a follow up if deemed necessary. The remaining bilaterally deaf children, and also the children deaf in one ear only had either signs of otitis media, past or present, or had wax in the ears, though 6 children deaf in one ear only had no apparent cause for this deafness.

Table 11

Intelligence	Boys		Girls	
	Nos. deaf in both ears	Nos. deaf in one ear only	Nos. deaf in both ears	Nos. deaf in one ear only
A	—	—	—	1
B	4	3	3	7
C	2	5	2	6
D	—	6	4	4
E	2	—	—	—
N.S. ..	1	—	1	3
Total ..	9	14	10	21

No intelligence gradient was noted in the "deaf" children; the frequency distribution according to intelligence assessment can be seen in Table 11.

Summary and Conclusions

1. This survey is no way representative of school leavers in Bristol but only of secondary modern school leavers.
2. The inadequate descriptions of the fathers' occupations by the 14-15 age group examined caused great difficulty in assessing results. Accurate social class placing proved impossible in almost one third of the children.

This is very important for by this experience any survey involving social class distribution dependent on children's answers seems doomed to failure. In future, surveys intending to show special class distributions, based on information obtained from children, must be viewed with suspicion.

It is suggested that if parental occupation is required for any survey of a worthwhile nature then (1) the survey should coincide with a school medical inspection, and (2) some form of questionnaire could be taken home by the child for the father to fill in and this could then be returned to the School Medical Officer.

In Bristol the child normally is given a form to be filled in by the parents regarding infectious diseases prior to the medical inspection. It should be a matter of relative ease to add to this form, the question asking for the accurate occupation of the father if it is necessary to require this information.

3. 12·1 per cent of boys and 20·5 per cent of girls did not have an intelligence assessment. Again accurate trends could not be determined because of these omissions.
4. There was no standard method of filling up the forms used and different School Medical Officers filled up the forms in different ways. This was confusing at times and was a possible source of error.

5. A large proportion of boys (18·5 per cent of the total examined) and girls (24·2 per cent of the total examined) had the ears obscured by wax. If wax is a sign of health then it would be a meddlesome practice to remove it to ascertain the state of the ear when the child is in good health. On the other hand for further accuracy the wax should be removed or it is almost certain that some defects are hidden by it.
6. 6·4 per cent of boys and 7·7 per cent of girls presented with other ear defects—it is more than likely that this difference occurred by chance. Some 3·12 per cent of boys and girls were placed in a category where by virtue of the defect found, i.e. perforation and/or discharge, current infection was thought to be likely.
7. No intelligence or social class trend was apparent in children with wax nor in those with defects.

STATISTICAL TABLES
YEAR ENDED 31st DECEMBER, 1956

**Table I. MEDICAL INSPECTION OF PUPILS ATTENDING
MAINTAINED PRIMARY AND SECONDARY SCHOOLS**
(including special schools)

A.—PERIODIC MEDICAL INSPECTIONS

1955	Number of Inspections in the Prescribed Groups:—								1956
8,075	Entrants	..	..	..	..	..	..	..	6,378
6,790	Second Age Group	..	..	..	..	..	..	..	4,210
4,366	Third Age Group	..	..	..	..	..	..	..	4,597
19,231					TOTAL	..	..	..	15,185
3,587	Number of other Periodic Inspections				..	..	..	..	3,292
22,818					GRAND TOTAL		..	..	18,477

B.—OTHER INSPECTIONS

25,073	Number of Special Inspections	..	..	..	..	..	..	25,640
25,209	Number of Re-inspections	..	..	..	..	..	..	26,197
50,282					TOTAL	..	..	51,837

C.—PUPILS FOUND TO REQUIRE TREATMENT

**Number of Individual Pupils Found at Periodic Medical Inspection to
Require Treatment**
(Excluding Dental Diseases and Infestation with Vermin)

1955				1956		
For Def. Vision*	For any other condn.	Total Individ. pupils		For Def. Vision*	For any other condn.	Total Individ. pupils
49	505	552	Entrants	43	429	464
161	319	460	Second age group	92	207	289
195	178	350	Third age group	157	151	300
405	1,002	1,362	Total (prescribed groups) ..	292	787	1,053
101	117	209	Other Periodic Inspections ..	108	92	195
506	1,119	1,571	GRAND TOTAL	400	879	1,248

* Excluding Squint.

**D.—CLASSIFICATION OF THE PHYSICAL CONDITIONS OF
PUPILS INSPECTED IN THE AGE GROUPS RECORDED IN TABLE I.A**

Age Groups Inspected	Number of Pupils Inspected	Satisfactory		Unsatisfactory			
		No.	% of Col. (2)	No.	% of Col. (2)		
(1)	(2)	(3)	(4)	(5)	(6)		
Entrants	6,378	5,882	92.2	496	7.8		
Second Age Group	4,210	4,005	95.1	205	4.9		
Third Age Group	4,597	4,426	96.3	171	3.7		
Additional Period Inspections:	3,292	3,195	97.1	97	2.9		
TOTAL ..	18,477	17,508	94.8	969	5.2		
1955 TOTAL	22,818	A (Good)		B (Fair)		C (Poor)	
		No.	% of Col.2	No.	% of Col.2	No.	% of Col. 2
		13,995	61.33	8,607	37.72	216	0.95

Table II. INFESTATION WITH VERMIN

1955		1956
123,476	(i) Total number of examinations in the schools by the nurses or other authorised persons	117,566
2,347	(ii) Total number of individual pupils found to be infested	2,133
324	(iii) Number of individual pupils in respect of whom cleansing orders were issued (Section 54 (2), Education Act, 1944)	301
46	(iv) Number of individual pupils in respect of whom cleansing orders were issued (Section 54 (3), Education Act, 1944)	57

Table III. RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31st DECEMBER, 1956
A.—PERIODIC INSPECTIONS

1955		Defect or Disease (2)	PERIODIC INSPECTIONS				1956 TOTAL	
No. of defects			Entrants		Leavers		(including all other age groups inspected)	
Req. treat- ment	Req. obs. but not treat- ment		Req. treat- ment	Req. obs.	Req. treat- ment	Req. obs.	Req. treat- ment	Req. obs.
			(3)	(4)	(5)	(6)	(7)	(8)
100	69	Skin	15	20	26	1	94	37
506	101	Eyes—(a) Vision	43	21	156	13	400	109
41	49	(b) Squint	19	11	—	—	25	14
8	15	(c) Other	1	6	—	1	3	11
40	39	Ears—(a) Hearing.. ..	13	9	2	—	22	14
23	46	(b) Otitis Media	6	14	5	3	22	26
10	20	(c) Other	4	4	—	1	6	13
227	313	Nose and Throat	118	254	28	4	188	324
42	66	Speech	11	54	—	1	16	62
21	117*	Lymphatic Glands	15	98	—	1	16	114
20	101	Heart	15	45	5	3	25	63
99	176	Lungs	53	96	10	4	85	129
—	—	Developmental:						
—	—	(a) Hernia	—	—	—	—	—	—
—	—	(b) Other.. ..	—	4	—	—	—	6
10	40	Orthopaedic:						
11	42†	(a) Posture	6	14	2	1	16	44
120	217	(b) Feet	4	7	1	—	8	14
—	—	(c) Other.. ..	30	74	6	7	91	157
—	7	Nervous System:						
7	69	(a) Epilepsy	2	1	—	—	2	1
15	23	(b) Other.. ..	3	42	1	1	8	72
—	—	Psychological:						
—	—	(a) Development	11	9	—	—	12	13
—	—	(b) Stability	—	—	—	—	—	—
733	504	{ Abdomen	—	—	—	—	—	—
—	—	{ Other	236	224	192	15	688	473

* 1955 Cervical Glands
† 1955 Flat Feet

B.—SPECIAL INSPECTIONS

1955 <i>No. of Defects</i>		Defect or Disease	1956 <i>No. of Defects</i>	
Requiring treatment	Requiring observation		Requiring treatment	Requiring observation
4,113	37	Skin	4,359	52
1,226	58	Eyes—(a) Vision	1,369	135
44	17	(b) Squint	77	10
750	8	(c) Other	579	9
52	22	Ears—(a) Hearing	81	11
136	6	(b) Otitis Media	87	19
376	6	(c) Other	361	21
571	197	Nose and Throat	483	189
45	30	Speech	41	34
40	37	Lymphatic Glands	22	56
(cervical glands)				
12	55	Heart	17	32
184	100	Lungs	119	104
		Developmental:		
4	—	(a) Hernia	—	—
9	4	(b) Other	14	1
		Orthopaedic—		
16	31	(a) Posture	29	27
49(Flat Foot)	9	(b) Feet	32	12
327	97	(c) Other	376	78
		Nervous System—		
5	7	(a) Epilepsy	2	1
41	36	(b) Other	56	70
		Psychological—		
24	13	(a) Development	33	22
13	2	(b) Stability	18	—
		Abdomen	—	—
6,165	292	Other	5,379	276

Table IV

TREATMENT OF PUPILS ATTENDING MAINTAINED PRIMARY AND
SECONDARY SCHOOLS (INCLUDING SPECIAL SCHOOLS)

Group I—Eye Diseases, Defective Vision and Squint

No. of Cases dealt with 1955			No. of Cases known to have been dealt with 1956	
By the Authority	Otherwise		By the Authority	Otherwise
1,224	—	External and other, excluding errors of refraction and squint	1,250	—
5,308	—	Errors of refraction (including squint)	6,197	—
6,532	—	Total	7,447	—
2,418	—	Number of pupils for whom spectacles were prescribed	2,486	—

Group 2—Diseases and Defects of Ear, Nose and Throat

No. of Cases dealt with 1955			No. of Cases known to have been treated 1956	
By the Authority	Otherwise		By the Authority	Otherwise
—	39	Received operative treatment	—	24
—	1,714	(a) for diseases of the ear	—	2,095
—	183	(b) for adenoids and chronic tonsillitis	—	138
597	132	(c) for other nose and throat conditions	576	141
		Received other forms of treatment ..		
597	2,068	Total	576	2,398
		Total number of pupils in schools who are known to have been provided with hearing aids.		
		(a) in 1956	1	19
		(b) in previous years	2	59

Group 3—Orthopaedic and Postural Defects

1955			1956	
By the Authority	Otherwise		By the Authority	Otherwise
422	172	Number of pupils known to have been treated at clinics or out-patient departments	436	200

Group 4—Diseases of the Skin (excluding uncleanness for which see Table II)

No. of Cases treated or under treatment during the year 1955			No. of Cases treated or under treatment during the year by the Authority 1956
By the Authority	Otherwise		
—	24	Ringworm (i) Scalp	—
208	—	(ii) Body	360
39	1	Scabies	54
458	3	Impetigo	282
3,521	134	Other skin diseases	3,877
4,226	162	Total	4,573

Group 5—Child Guidance Clinic

No. of Cases treated 1955		Number of pupils treated at Child Guidance Clinics under arrangements made by the Authority 1956
in the Authority's Child Guidance Clinics	Elsewhere	
358	94	336

Group 6—Speech Therapy

No. of Cases treated 1955		No. of Cases treated 1956
By the Authority	Otherwise	
367	12	231
Number of pupils treated by Speech Therapists		

Group 7—Other Treatment Given

1955		1956
9,673	(a) Number of cases of miscellaneous minor ailments treated by Authority	9,324
	(b) Pupils who received convalescent treatment under School Health Service arrangements	56
	(c) Pupils who received B.C.G. vaccination	3,279
	(d) Other than (a), (b) and (c) above	
1,064	(1) Chiropody Clinic	1,275
231	(2) Ultra Violet Light	142
329	(3) Enuretic Clinic	304
993	(4) T.B. Contact Clinic	928
215	(5) Skin (including Wart Clinic)	287
12,505	Total (a)—(d)	15,595

Table V

DENTAL INSPECTION AND TREATMENT CARRIED OUT BY THE AUTHORITY

1955		1956
38,154	(1) Number of pupils inspected by the Authority's Dental Officers	
5,561	(a) at Periodic Inspections	39,624
	(b) as Specials	6,777
43,715	Total (1)	46,401
31,476	(2) Number found to require treatment	33,711
24,352	(3) Number offered treatment	30,619
18,310	(4) Number actually treated	18,393
37,524	(5) Number of attendances made by pupils for treatment including those recorded at heading 11(h)	43,594
263	(6) Half days devoted to: Periodic (School) Inspection	274
3,827	Treatment	4,617*
4,090	Total (6)	4,891
14,051	(7) Fillings: Permanent teeth	16,616
1,415	Temporary teeth	2,427
15,466	Total (7)	19,043
12,938	(8) Number of teeth filled: Permanent teeth	14,268
1,285	Temporary teeth	1,749
14,223	Total (8)	16,017
5,999	(9) Extractions: Permanent teeth	6,825
18,855	Temporary teeth	17,728
24,854	Total (9)	24,553
13,112	(10) Administration of general anaesthetics for extraction	11,326
	(11) Orthodontics:	
	(a) Cases commenced during the year	547
	(b) Cases carried forward from previous year	249
	(c) Cases completed during the year	48
	(d) Cases discontinued during the year	—
	(e) Pupils treated with appliances	—
	(f) Removable appliances fitted	—
	(g) Fixed appliances fitted	—
	(h) Total attendances	852
	(12) Number of pupils supplied with artificial dentures	104
7,319	(13) Other operations: Permanent teeth	9,810
6,037	Temporary teeth	7,564
13,356	Total (13)	17,374

* In addition 503 (1956) half days were given to the treatment of mothers and young children.
427 (1955)

The figures given under (11) Orthodontics refer to work done at the diagnostic clinic held at the Authority's Central Clinic. Children requiring treatment with appliances are referred to the Bristol Dental Hospital for further treatment and provision of the necessary appliances. The cases completed (c) are those that were dealt with at the clinic by extractions.

SCHOOL NURSES

1955		1956
	Following is a summary of the Nurses' Survey for the year:—	
2,707	No. of sessions	3,115
86,845	No. of children surveyed	98,060
3,180	No. with defects	3,750
	Of the cases with defects:—	
2,278	No. referred to Doctor	2,766
345	No. referred to Doctor for Eye Specialist	315
297	Minor ailments referred for treatment	324
254	Will attend own doctor or hospital	336
6	Refusals	9

Sunlight Clinic

During 1956, 90 children of school age and 9 children at nursery schools were given a complete course of artificial sunlight treatment. Details of the cases are given below:—

Defect	Prim. Secy. and Gram. Schools			Nursery Schools		
	No. Treated	Im-proved	Station-ary	No. Treated	Im-proved	Station-ary
General debility ..	29	24	5	3	3	—
Bronchitis	13	12	1	1	1	—
Cough	3	2	1	2	2	—
Enlarged glands ..	6	5	1	—	—	—
Malnutrition	—	—	—	—	—	—
Miscellaneous ..	39	38	1	3	3	—
Total	90	81	9	9	9	—

SCHOOL CLINICS

1955			1956
No. of attend- ances	Work		No. of attend- ances
41,524	Central Health Clinic	Inspection clinic; treatment of minor ailments; ear, nose and throat clinic; dental treatment; orthodontic treatment; refraction clinic; asthma clinic; enuretic clinic; T.B. contact clinic; treatment of scabies cases; orthopaedic clinic; remedial exercises; electrical treatment; physiotherapy; massage and foot treatment ..	37,492
9,068	Brooklea Clinic ..	Inspection clinic; treatment of minor ailments	10,390
20,879	Bedminster Health Clinic	Inspection clinic; treatment of minor ailments; ear, nose and throat clinic; dental treatment; and refraction clinic	18,752
1,137	William Budd Health Centre	Inspection clinic; treatment of minor ailments	1,050
7,266	Granby House Clinic	Inspection clinic; treatment of minor ailments	6,037
768	Lawrence Weston Clinic	Inspection clinic; treatment of minor ailments; dental treatment	1,849
8,002	Knowle Health Clinic	Inspection clinic; treatment of minor ailments	9,546
	Speedwell Health Clinic	Inspection clinic; treatment of minor ailments; ear, nose and throat clinic; dental treatment and refraction clinic	19,500
21,928	Verrier Road Clinic ..	Treatment of minor ailments	3,765
3,480	Portway Clinic. . .	Inspection clinic; treatment of minor ailments; ear, nose and throat clinic; dental treatment and refraction clinic	14,998
15,641	Southmead Clinic ..	Inspection clinic; treatment of minor ailments; ear, nose and throat clinic; dental treatment and refraction clinic	23,920
23,324	Charlotte Keel Clinic	Inspection clinic; treatment of minor ailments; dental treatment	5,907
—	Mary Hennessy Clinic	Inspection clinic; treatment of minor ailments; dental treatment	280
—	John Milton Clinic ..	Inspection clinic; treatment of minor ailments; dental treatment	122
15,509	Connaught Road School Clinic ..	Treatment of minor ailments	11,553
397	Day E.S.N. Special Schools	Treatment of minor ailments	350
13,978	Novers Open Air School	Remedial exercises and massage; treatment of minor ailments	12,888
900	Cardio-rheumatic Clinic	Cases of heart disease and rheumatic disease	780
2,256	Artificial Light Clinic	Cases of debility	1,265
2,879	Child Guidance Clinic		2,876
3,104	Speech Clinics		4,832
1,090	Dental Hospital		1,018
—	Oral Hygienist		1,553
192,922	Total Attendances		190,723

